DOCUMENT RESUME

ED 421 771 EA 029 169

TITLE	The Annual Condition of Education Report. A Report on PreKindergarten, Elementary, and Secondary Education in Iowa.
INSTITUTION	Iowa State Dept. of Education, Des Moines.
PUB DATE	1997-00-00
NOTE	122p.
PUB TYPE	Guides - Non-Classroom (055) -- Numerical/Quantitative Data (110)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	*Academic Achievement; At Risk Persons; *Economic Factors; *Educational Finance; *Educational Trends; Elementary Secondary Education; *Enrollment Trends; Preschool Education; Private Education; Public Education; *School Demography; School Personnel; Scores; Standardized Tests; Tables (Data)
IDENTIFIERS	*Iowa

ABSTRACT

This annual report, which provides information on the status of Pre-K through 12 education in Iowa, is divided into six basic sections: preface, enrollments, staff, programs, student performance, and school finance. The preface provides context by describing Iowa's changing demographic, economic, and social landscape. Each section presents summary information based on data provided by local public school districts and nonpublic schools. The major portion of data comes from the State Department of Education's Basic Education Data Survey (BEDS). Where possible, data are summarized by seven standard enrollment categories and for the state as a whole. Emphasis is on changes occurring over time. The base year of 1985-86 was chosen, as it represents a period just prior to implementing significant changes in education, including revised state accreditation standards and a state-supported minimum teacher salary. Comparisons are generally for the base year, the 1996-97 school year, and the most recent prior year. For school expenditure information, 1995-96 was used. Whenever possible, Iowa data are compared with regional and national data. District-by-district comparisons are not made in this report. Student performance on Iowa testing programs has gradually declined; performance on the American College Testing Program was better than the national average. (Included are an introduction and 104 tables.) (MLH)

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The Annual CONDITION OF EDUCATION *Report*

1997

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EA 029 165

Grimes State Office Building in Des Moines - Home of the Iowa Department of Education

A Report on

Pre Kindergarten, Elementary, and Secondary Education

in Iowa

Iowa Department of Education

1997

Printed on Recycled Paper

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The Annual Condition of Education Report

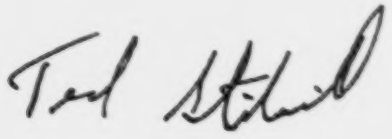
To the Citizens of Iowa...

The basic strength of Iowa's traditional success in student achievement has been the high level of community ownership for the education of our young people. By virtue of both policy and practice, we have demonstrated our confidence in local decision making processes. As education grows more complex and the needs of our young people become more varied and more challenging to meet, it is more important than ever before that local decisions be based on good information. The *Condition of Education Report* tries to model the use of information for decision making at the state level. This report provides an essential base of information for state education policy makers.

The *Condition of Education Report* can also be used as a resource at the local level as well. Nearly all of the data reported at the state level has a local component that can be identified and compared. I would strongly invite each district to pursue this kind of analysis.

This year we have included an introductory section that includes some background information that attempts to describe the social, economic and demographic context which surrounds the education of our youth. This is an increasingly important consideration as we view our educational responsibilities in relationship to other partners in the community. The entire community must join together and must be supported by state government in working to provide an increasingly better quality of life for children and for families in Iowa.

Finally, if you have suggestions for improving this report so that it is more useful to you, please let us know.



Ted Stilwill, Director
Iowa Department of Education

Introduction...

The *Condition of Education Report* is divided into six basic sections: preface, enrollments, staff, program, student performance, and school finance. The preface provides a context for the *Condition of Education Report* by describing Iowa population and economic changes. Each section presents summary information on the status of education with respect to data provided by local public school districts and nonpublic schools. The major portion of the data comes from the Basic Educational Data Survey (BEDS). The Basic Educational Data Survey is the Department of Education's primary data source document for PK-12 information on enrollments, staff, programs, policies and procedures, dropouts, graduate follow-up, and high school completers, as well as a series of other specialized reporting areas. The BEDS reports are completed by public and nonpublic schools each spring and fall and serve to provide data required for state and federal reports as well as for other uses related to policy development.

Where possible, data are summarized by seven standard enrollment categories and for the state as a whole. The emphasis focuses on the change which has occurred over time. The base year of 1985-86 was chosen as it represented a period just prior to the implementation of significant changes in education, including the revision of school accreditation standards and a state supported minimum teacher salary. Comparisons are generally made using the base year, the current school year (1996-97), and the most recent prior year. In the case of school expenditure information 1995-96 data are used. Whenever possible, Iowa data are compared with regional and national data.

In keeping with the original intent of the principles which guided the development of the *Condition of Education Report* and the Statewide Condition of Education Advisory Council, specific, district-by-district comparisons are not made in the report.

The *Annual Condition of Education Report* provides information on the status of PK-12 education in the state. The focus of the report is on changes which have occurred over time. Current information and 1985-86 baseline information on enrollments, programs, staff, finance, and student performance are provided.

The purpose of this preface is to provide a demographic, social, and economic context for education in Iowa by describing Iowa's changing population, economic, and social landscape. Included in the preface are three major categories of statewide demographics:

1. Population characteristics;
2. Economic characteristics; and
3. At-risk population characteristics.

The focus on these areas is on the changes which have taken place over the past several years.

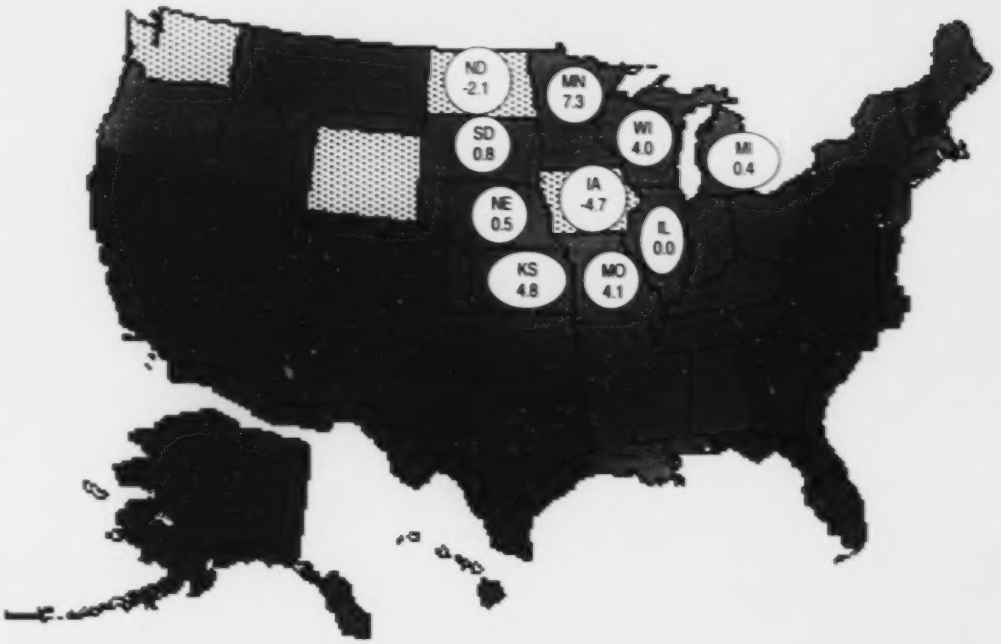
Included in population characteristics are general population trends, urban/rural population changes, household types, international migration patterns, and births. The economic characteristics encompass the areas of workforce, per capita income, and wage growth. The at-risk population characteristics include the areas of poverty, teen out-of-wedlock births and teen crime and violence.

Population...

U.S. Population

FIGURE 1P — U.S. BY STATE POPULATION CHANGE

1980-1990



SOURCE: U.S. CENSUS BUREAU, CENSUS OF POPULATIONS AND HOUSING - 1980, 1990

POPULATION LOSS

GAIN OF LESS THAN 10 PERCENT

GAIN OF 10 PERCENT OR MORE

- The U.S. population grew by 9.8 percent during the decade of the 1980's. The areas of the U.S. recording the largest percentage increases in population during this time period (10 percent or more) were the Southeast and Southwest, while the Midwest and South generally realized more moderate increases of less than ten percent.

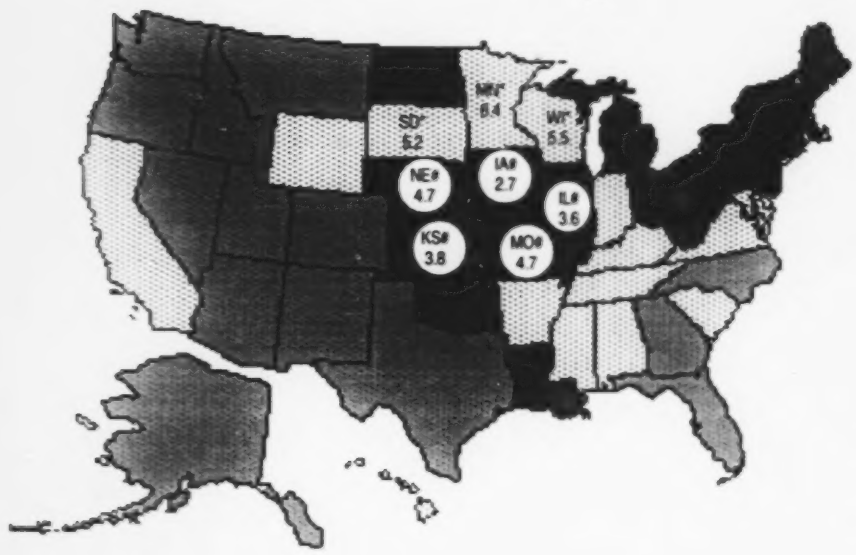
- Iowa, with nearly a five percent loss in population (-4.7 percent), was one of only four states to experience a population decrease during the 1980's. The only other midwest state to lose population was North Dakota (-2.1 percent). The average percent population change for these states (North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Wisconsin, Illinois, and Michigan) was an increase of 1.5 percent.

Population...

U.S. Population

FIGURE 2P — U.S. BY STATE POPULATION CHANGE

1990 - 1996



SOURCE: U.S. CENSUS BUREAU, CENSUS OF POPULATION AND HOUSING 1990; U.S. POPULATION ESTIMATES FOR 1996

DECREASE OR INCREASE LESS THAN 5.0 PERCENT

INCREASE 5.0 PERCENT TO 9.9 PERCENT

INCREASE 10.0 PERCENT OR MORE

- From 1990-1996 Iowa began to show a modest increase in population according to the latest U.S. Census figures. The population increase for Iowa has been gradual, but consistent since 1990.

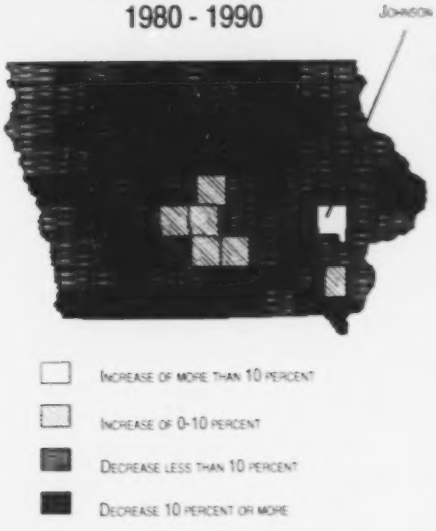
- Of the midwest states noted, the percentage gain in population since 1990 was the smallest for Iowa.

- If the current trend continues, by the year 2,000, Iowa will have regained the population it lost during the decade of the 1980's.

Population...

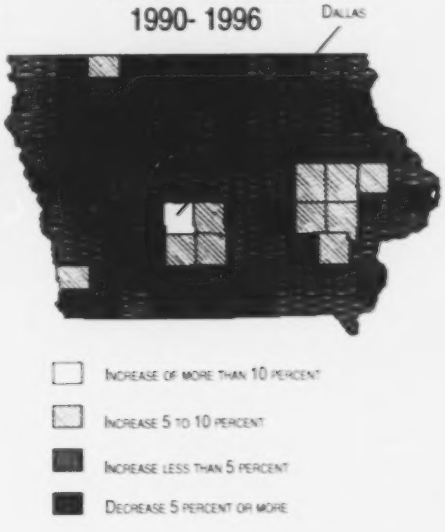
Iowa Specific Population

FIGURE 3P — IOWA
POPULATION CHANGE
1980 - 1990


JOHNSON
INCREASE OF MORE THAN 10 PERCENT
INCREASE OF 0-10 PERCENT
DECREASE LESS THAN 10 PERCENT
DECREASE 10 PERCENT OR MORE

SOURCE: U.S. CENSUS BUREAU, CENSUS OF POPULATION AND HOUSING, 1990.

FIGURE 4P — IOWA
POPULATION CHANGE
1990- 1996



SOURCE: U.S. CENSUS BUREAU, COUNTY POPULATION ESTIMATES FOR 1996, 1997.

- In general, the same Iowa counties to experience significant losses in the 1980's have continued to experience losses in the 1990's.

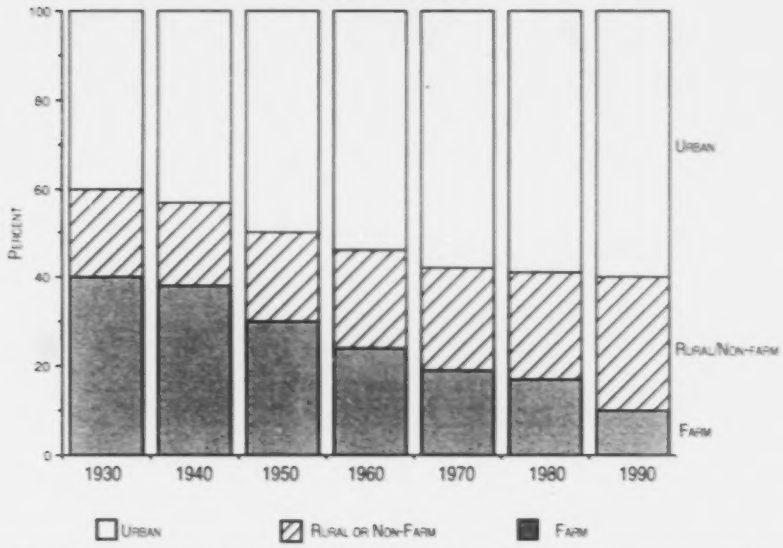
- Between 1980 and 1990, the primary counties to gain population included the counties surrounding the Des Moines Metropolitan Statistical Area (MSA), Johnson County (Iowa City MSA), Linn County (Cedar Rapids MSA), and Henry County. All other counties of the state declined in population.

- The rural areas and counties declined in 1980 to 1990 and declined, or increased far less, than more populous areas of the state from 1990 to 1996.

- The suburbs within the counties experiencing population growth grew more than the central cities (e.g. Coralville, 34.6 percent vs. Iowa City, 18.3 percent; West Des Moines, 44.8 percent; Urbandale, 31.5 percent; Johnson, 86.4 percent vs. Des Moines 1.1 percent).

Population...

FIGURE 5P — IOWA URBAN AND RURAL CHANGES
PERCENT OF PERSONS BY PLACE OF RESIDENCE
1930 - 1990



SOURCE: U.S. CENSUS BUREAU, CENSUS OF POPULATION AND HOUSING, 1930-1990

TABLE 1P — IOWA URBAN/RURAL CHANGES
PERCENT OF PERSONS BY PLACE OF RESIDENCE
1980 - 1990

Iowa Population	Total	1980 Percent	1990 Percent
Urban and Rural Residence	2,776,755	100.0	100.0
Urban Population	1,682,860	58.6	60.6
Rural Population	1,093,895	41.4	39.4
Non-Farm Population	837,333	28.0	30.2
Farm Population	256,562	13.4	9.2

SOURCE: U.S. CENSUS BUREAU, CENSUS OF POPULATION AND HOUSING, 1980-1990.

- The Iowa population has been shifting from rural to urban Iowa since early U.S. Census records have tabulated this factor. Forty percent of the population lived in urban Iowa in 1930 compared to 60.6 percent in 1990.
- Of the population living in rural Iowa, the farm population has declined from about 30 percent in 1930 to just over nine percent of the total in 1990. The rural, non-farm population increased from approximately 20 percent in 1930 to about 30 percent of the total in 1990.
- The total rural population declined two percentage points (41.4 to 39.4 percent) from 1980 to 1990. The farm population component dropped by more than four percentage points (13.4 to 9.2 percent), while the non-farm population actually increased during the period.

Population...

International Migration

FIGURE 6P — IMMIGRATION TO THE U.S. BY STATE OF INTENDED RESIDENCE

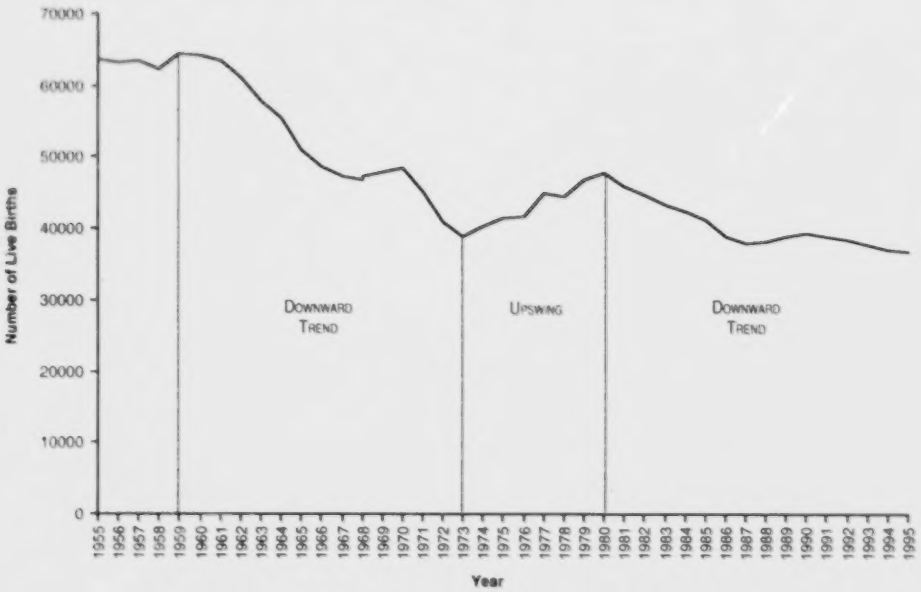
SOURCE: U.S. IMMIGRATION AND NATURALIZATION SERVICE, 1996

- Three-tenths of a percent of the U.S. population were immigrants in 1996.
- Iowa ranked 35th of all states in intended residence of immigrants with 0.3 percent or 3,037 of the 915,000 international immigrants to the U.S. for 1996. This figure translates to 0.1 percent of Iowa's estimated population.
- States with the greatest share or number of expected immigrants were California, New York, Texas and Florida.

Population...

Births

FIGURE 7P — IOWA
RESIDENT LIVE BIRTHS FROM
1955 - 1995



SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH, CENTER FOR HEALTH STATISTICS, RESIDENT LIVE BIRTHS, 1955-1995

- During the time period from 1955 to 1995 the number of Iowa resident live births peaked in 1959 at 64,473.
- The trend in births has been downward since 1959 to a low in 1973 with 38,898 live births, followed by an upswing and another peak in 1980 at 47,797 live births and has continued the downward trend since 1980, surpassing the 1973 low with only 36,790 live births in 1995.
- The decline in Iowa resident live births was a factor as well as a reflection of the Iowa population loss of the 1980's. Births are one of the major components of population change which can enhance or restrict population growth. In Iowa, the decreasing birth rates have continued to contribute to the restricted population growth.

Population...

Household Types

TABLE 2P — CHANGE IN FAMILY HOUSEHOLD TYPES 1980-1990

	U.S. HOUSEHOLDS (IN THOUSANDS) 1990 NUMBER	PERCENT OF TOTAL	U.S. PERCENT CHANGE 1980-90	IOWA HOUSEHOLDS 1990 NUMBER	PERCENT OF TOTAL	IOWA PERCENT CHANGE 1980-90
TOTAL HOUSEHOLDS	91,947	100.0	14.4	1,064,000	100.0	1.0
MARRIED COUPLES, NO CHILDREN*	27,494	29.9	13.6	345,670	32.5	3.3
MARRIED COUPLES, W/CHILDREN*	24,224	26.3	-2.2	298,294	28.0	-15.7
SINGLE PARENT - WOMEN*	5,865	6.4	18.9	52,167	4.9	-17.6
SINGLE PARENT - MEN*	1,275	1.4	67.8	19,674	1.8	66.1
SINGLES LIVING ALONE	22,580	24.6	23.7	275,931	25.9	12.1
SINGLES LIVING WITH NON-RELATIVES	5,911	6.4	47.0	59,394	5.6	31.8
ALL OTHER HOUSEHOLDS	4,598	5.0	NA	12,870	1.2	NA

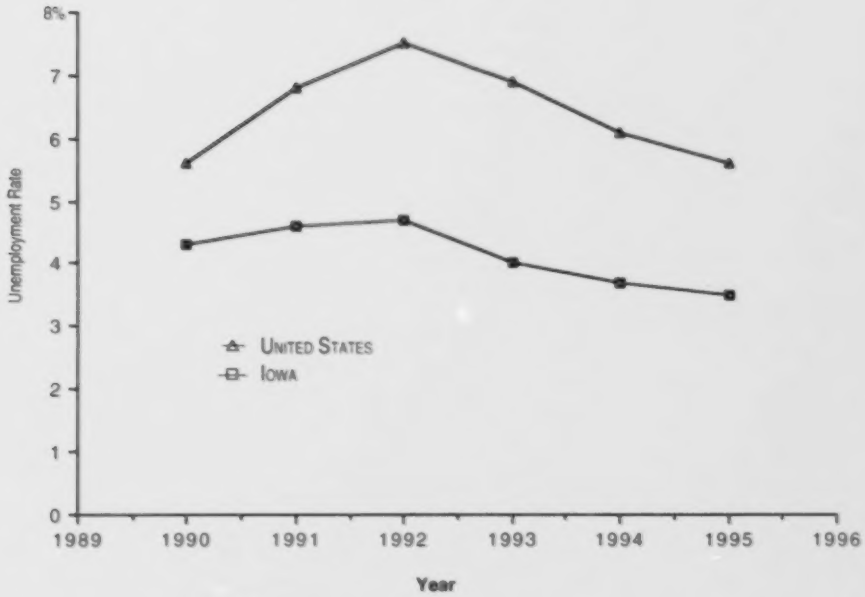
SOURCE: U.S. BUREAU OF THE CENSUS, CENSUS OF POPULATION AND HOUSING, 1980, 1990.
NOTES: PERCENTS MAY NOT TOTAL TO 100 PERCENT DUE TO ROUNDING ERROR.
*CHILDREN UNDER AGE 18.

- The increase in number of Iowa households during the 1980's compared to the decrease in the total population, indicates the shrinking household size.
- The percent of married couple households with children declined for Iowa to a greater extent than for the U.S. This is reflective of Iowa's out-migration during the 1980's and its aging population.
- The percent of U.S. and Iowa single parent households increased, with single male householders showing the greatest percent change, 66.1 percent for Iowa. This compares to 67.8 percent for the nation.
- Single persons living with non-relatives increased sharply for the U.S., 47.0 percent, and Iowa, 31.8 percent, while singles living alone increased as well but not as much, 23.7 and 12.1 percent for the nation and for Iowa respectively.
- Changing household types nationally as well as within Iowa reflect the move away from traditional families to non-traditional living arrangements.

Economics...

Workforce

FIGURE 8P — IOWA VS. U.S.
UNEMPLOYMENT RATES
1990-1996



SOURCE: LABOR MARKET INFORMATION BUREAU, IOWA WORKFORCE DEVELOPMENT AND BUREAU OF LABOR STATISTICS, U.S. DEPARTMENT OF LABOR.

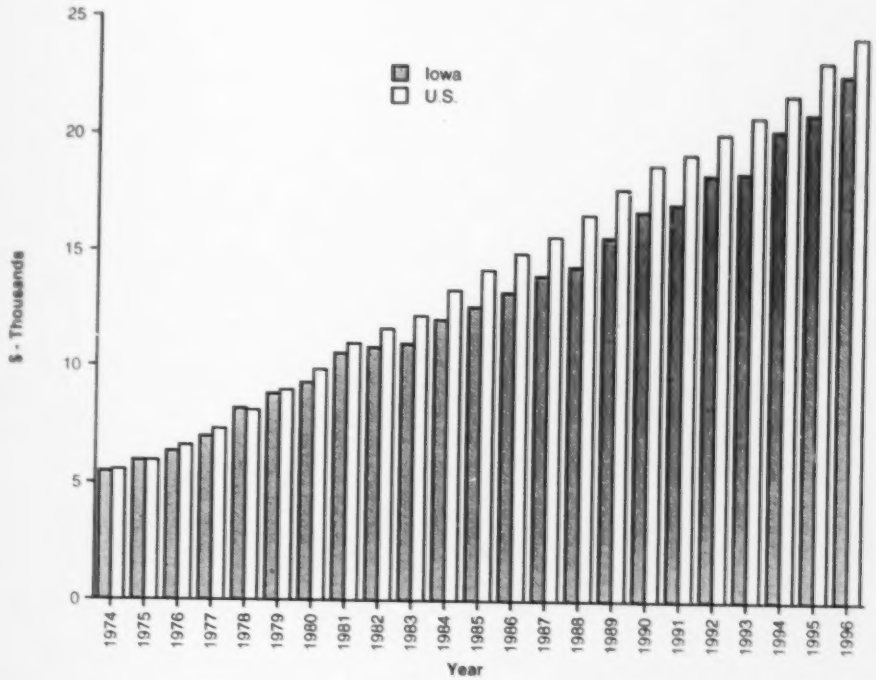
- Since 1990, the Iowa unemployment rate rose gradually until 1992, at which time the rates began a downward trend. In comparison, the U.S. unemployment rate, which has been consistently greater than the Iowa rate, rose more sharply during the same period of time and then began a downward trend declining at a somewhat steeper rate than the Iowa trend.

Note: According to the 1990 census, 66.0 percent of the Iowa population, age 16 and above, were in the workforce, including civilian and armed forces. This represented an increase of 3.5 percent from 1980. Of the civilian workforce, 4.3 percent were unemployed in 1990, down 0.5 percent from 1980.

Economics...

Per Capita Income

FIGURE 9P — PER CAPITA INCOME IN IOWA AND THE U.S. 1974-1996



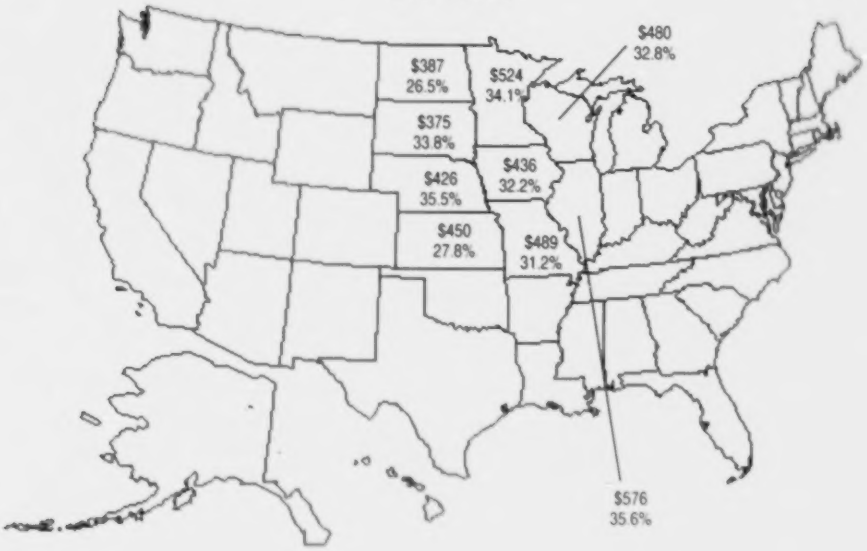
SOURCE: BUREAU OF ECONOMIC ANALYSIS, U.S. DEPARTMENT OF COMMERCE, 1974-1996.

- Iowa's per capita income figures began to consistently lag behind the nation in 1979, during the farm crises and the population exodus. The difference has continued to widen in recent years.
- The Iowa unadjusted per capita income has risen from $5,475 in 1974, to $22,560 in 1996. U.S. per capita income was nearly identical in 1974 but was $1,671 (6.9 percent) greater in 1996.

Economics...

Wage Growth

FIGURE 10P — AVERAGE WEEKLY WAGE CHANGE 1987-1995



SOURCE: LABOR-MARKET INFORMATION BUREAU, IOWA WORKFORCE DEVELOPMENT, 1996

- Iowa ranked sixth of nine area states in average weekly wage growth from 1987 to 1995 with an increase of 32.2 percent. The leading area states for wage growth for this period were Illinois (35.6 percent growth), followed by Nebraska (35.5 percent growth).
- Five of the nine area states ranked above Iowa ($436) in the magnitude of their average weekly wage for 1995. The leaders were Illinois ($576) and Minnesota ($524).

At-Risk Population...

Poverty

TABLE 3P — NUMBER AND RATE PER THOUSAND POPULATION OF AID TO FAMILIES WITH DEPENDENT CHILDREN (AFDC)

State	1996 AFDC Recipients	Percent Change from 1993 to 1996	1996 Population	Rate Per 1,000 Population 1996
Iowa	91,500	-9%	2,851,792	32.1
Illinois	664,700	-3%	11,846,544	56.1
Kansas	70,800	-19%	2,572,150	27.5
Minnesota	158,200	-17%	4,657,758	34.0
Missouri	132,300	-8%	5,358,692	24.7
Nebraska	38,600	-27%	1,652,093	23.4
N. Dakota	13,600	-27%	643,539	21.2
S. Dakota	16,800	-17%	732,405	22.6
Wisconsin	184,200	-24%	5,159,795	35.7
U.S.	12,827,000	-9%	265,283,783	48.4

SOURCE: IOWA DEPARTMENT OF HUMAN SERVICES, RESEARCH AND STATISTICS, JANUARY 1996
NOTES: POPULATION IS BASED ON 1996 U.S. CENSUS BUREAU ESTIMATES.
AFDC — AID TO FAMILIES WITH DEPENDENT CHILDREN.

- Iowa recipients of Aid to Families with Dependent Children (AFDC), in 1996 numbered 91,500, a decrease of nine percent from the same period in 1993. The total number of U.S. recipients also decreased by nine percent during the same time period.

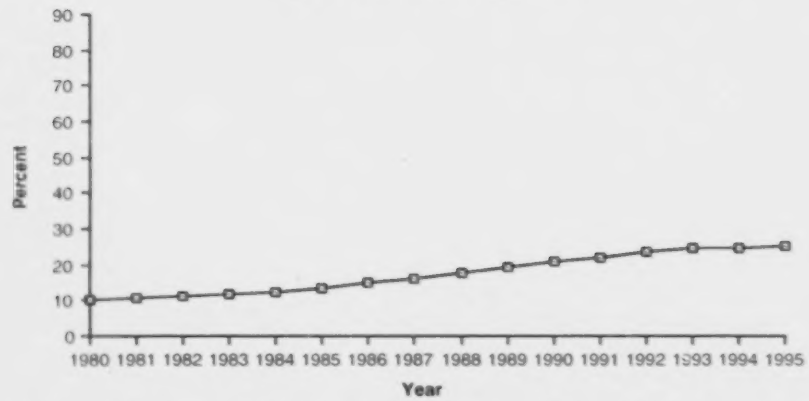
- Of nine surrounding states, Illinois had the greatest number of AFDC recipients with 664,700. North Dakota had the least number of recipients with 13,600. North Dakota recorded the greatest percent decrease in recipients, from 1993 to 1996, dropping 27 percent, while Illinois registered the lowest decrease, at three percent.

- Iowa ranked 4th out of the nine area states in the rate-per-thousand (32.1 per thousand) AFDC recipients, behind Illinois (56.1 per thousand), Wisconsin (35.7 per thousand), and Minnesota (34.0 per thousand). The U.S. rate was 48.4 recipients per thousand population.

At-Risk Population...

Teen, Out-of-Wedlock, Births

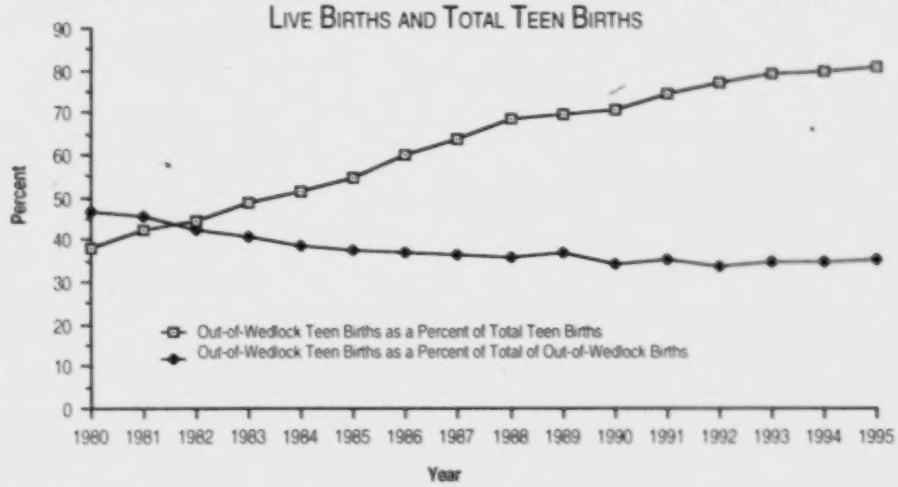
FIGURE 11P — IOWA
OUT-OF-WEDLOCK BIRTHS AS A PERCENT OF
TOTAL RESIDENT LIVE BIRTHS



SOURCE: CENTER FOR HEALTH STATISTICS, IOWA DEPARTMENT OF PUBLIC HEALTH, RESIDENT LIVE BIRTHS, 1980-1995

- The percent of Iowa births, out-of-wedlock, has been on the rise. In 1982, only 11.3 percent of all resident live births were out-of-wedlock. By 1995, about one in four Iowa resident live births were out-of-wedlock.

FIGURE 12P — IOWA
OUT-OF-WEDLOCK TEEN BIRTHS AS A PERCENT OF TOTAL OUT-OF-WEDLOCK
LIVE BIRTHS AND TOTAL TEEN BIRTHS



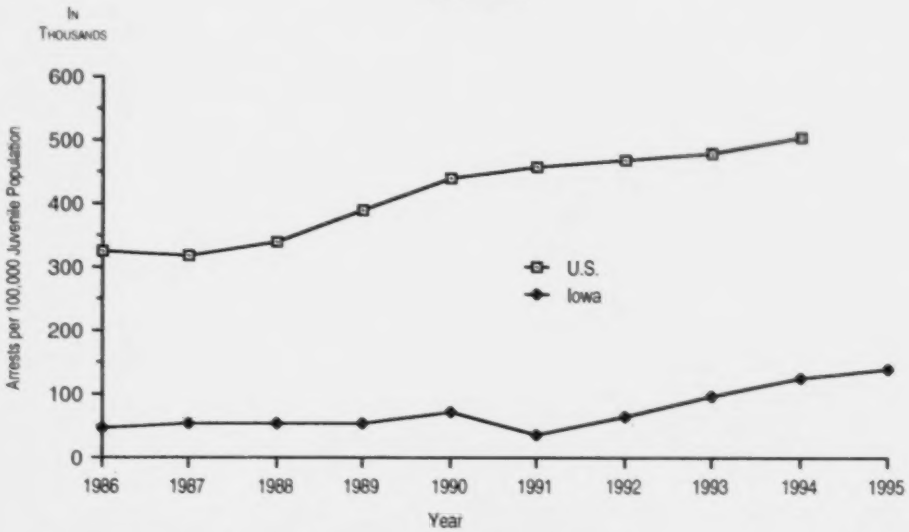
SOURCE: CENTER FOR HEALTH STATISTICS, IOWA DEPARTMENT OF PUBLIC HEALTH, RESIDENT LIVE BIRTHS, 1980-1995

- The percent of out-of-wedlock live births to teens has been on the rise since 1980. From 1980 to 1990, out-of-wedlock teen births increased from 38.2 percent to 70.9 percent. By 1995, the percent of out-of-wedlock live births to teens increased an additional ten percent to just over 80 percent.

At-Risk Population...

Teen Crime and Violence

FIGURE 13P — IOWA VS. U.S.
JUVENILE ARREST RATES
VIOLENT INDEX OFFENSES
1986-1995



SOURCE: UNIFORM CRIME REPORTS, 1986-1995; AND DEPARTMENT OF PUBLIC SAFETY, 1986-1995.

- Iowa's juvenile arrest rate for violent crimes; including murder, rape, robbery, and aggravated assault (non-misdemeanor), has consistently been lower than that of the nation.
- In 1986, the Iowa juvenile arrest rate for violent crimes was 46 arrests per 100,000 juvenile population, about 14 percent of the U.S. arrest rate of 325. Iowa's juvenile arrest rate in 1991 of 36 arrests per 100,000 represented about eight percent of the U.S. 1991 juvenile arrest rate (458).
- Since 1991, Iowa's juvenile arrest rate has been on the rise as has the rate for the nation, with 125 juvenile arrests per 100,000 population for 1994 or nearly 25 percent of the U.S. juvenile arrest rate (505).

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Expenditures Per Pupil 95
State Aid 96
Property Taxes 97
Income Surtaxes 97
Total Elementary and Secondary Education Budgets 98

Acknowledgments...

The authors of the Annual *Condition of Education Report* wish to thank the staff of the Iowa Department of Education who contributed to the production of this report. A special acknowledgment is extended to the others outside the department who made important contributions in sharing their data and thoughts with us. They included: Dr. David Frisbe, Dr. Robert Forsyth, and Dr. Timothy Ansley, Iowa Testing Programs; Dr. Robert Ziomek and Dr. James Maxey, American College Testing Program.

Enrollment

The composition of Iowa's student enrollments has changed markedly over the past decade through in-migration of limited English proficient students creating a substantial increase in minority student population. A summary of the changes in public and nonpublic student enrollments is provided in this section. The following areas of student demographics are addressed in the enrollment section: enrollment trends, five-year enrollment projections, racial/ethnic and limited English proficient student distributions, weighted non-English student distribution, open enrollment trends, growth of early childhood enrollment, and public school kindergarten program types.

Enrollment Trends

Table 1 reflects that enrollments in Iowa public schools increased for the eighth consecutive year since 1988-89, increasing to 505,587. This represents an increase of six percent or nearly 29,000 students since the recent low of 476,771 in 1988-89. The percentage increase from 1995-96 to 1996-97 represents about one-fifth of one percent. This represents the smallest annual percentage increase since enrollments began their upward climb in 1989-90.

Table 1

IOWA PUBLIC AND NONPUBLIC SCHOOL ENROLLMENTS
1985-86 - 1996-97

Year	Public	Nonpublic
1985-86	485,332	49,026
1986-87	481,205	48,520
1987-88	478,859	47,228
1988-89	476,771	47,373
1989-90	478,210	46,033
1990-91	483,396	45,562
1991-92	491,451	45,865
1992-93	495,342	45,229
1993-94	497,009	45,328
1994-95	500,592	44,752
1995-96	504,505	44,563
1996-97	505,587	44,302

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILES AND CERTIFIED ENROLLMENT FILES.

Nonpublic enrollments have continued to show a gradual decline since 1985-86, dropping to 44,302 in 1996-97 (Table 1). This represents a decline of 9.6 percent and a drop of 4,724 students during the period.

Table 2 displays public school enrollment trends on a grade level basis for 1985-86 and for the current and preceding school years. Grade levels reflecting increases over the preceding year include grades one through three, grade six and grade eight, and grades 10 through 12. The remaining grades reflected decreases compared to the previous year. Compared to the base year 1985-86, the current year enrollment reflecting the greatest percentage loss was kindergarten, down over nine percent. Grades six and seven reflected the greatest percentage increases of about 17 and 16 percent respectively over the period.

Table 2

IOWA PUBLIC SCHOOL ENROLLMENT BY GRADE LEVEL

Grade Level	1985-86	1995-96	1996-97	1995-96 to 1996-97 % Change	1985-86 to 1996-97 % Change
K	40,925	37,629	37,101	-1.40%	-9.34%
1	38,110	36,107	36,614	1.40	-3.93
2	35,387	35,029	35,706	1.93	0.90
3	34,508	34,884	35,004	0.34	1.44
4	32,977	36,431	34,918	-4.15	5.89
5	33,327	37,204	36,450	-2.03	9.37
6	32,038	37,117	37,604	1.31	17.37
7	32,653	38,833	37,890	-2.43	16.04
8	35,136	38,715	38,801	0.22	10.43
9	39,688	41,385	40,892	-1.19	3.03
10	39,337	39,680	40,277	1.50	2.39
11	37,203	36,861	38,093	3.34	2.39
12	35,906	34,565	35,650	3.14	-0.71
Other	18,137	20,065	20,587	2.60	13.51
Total	485,332	504,505	505,587	0.21	4.17

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILES.

Projected Enrollment

Five year enrollment projections are made for public schools using an average cohort survival methodology for grades one through twelve. Kindergarten enrollments are estimated by averaging five years of the ratio of live birth to kindergarten enrollments five years later (e.g., 1990 live births versus 1995 kindergarten enrollments). Pubic school enrollment projections, as shown in Table 3, reflect a slight increase in enrollments for the 1997-98 school year followed by small but steady decreases through school year 2001 - 2002. Nonpublic projections show a continual downward trend in enrollment through the 2001 - 2002 school year.

Table 3

PROJECTED IOWA PUBLIC AND NONPUBLIC SCHOOL ENROLLMENTS
1997-98 TO 2001-02

Year	Public	Nonpublic
1997-1998	506,472	44,323
1998-1999	505,391	43,944
1999-2000	502,088	43,400
2000-2001	497,578	42,944
2001-2002	494,472	42,553

SOURCE: IOWA DEPARTMENT OF EDUCATION, PUBLIC AND NONPUBLIC SCHOOL ENROLLMENT PROJECTIONS.

Distribution of Public School Students and Districts

The distribution of public school students and districts is displayed in Table 4. The distribution of students as well as districts with respect to enrollment category has changed markedly over the period from 1985-86 to 1996-97, although the change in the distribution of students has been less than the change in the distribution of school districts. In 1985-86, 54 percent of Iowa's public school districts had enrollments under 600, compared to only 38.5 percent in 1996-97. In 1985-86, 17.7 percent of public school students attended districts with enrollments under 600 compared to only 11.4 percent in 1996-97.

Table 4

DISTRIBUTION OF IOWA PUBLIC SCHOOL DISTRICTS AND STUDENTS BY ENROLLMENT CATEGORY
1985-86 vs. 1996-97

District Enrollment Category	1985-86 Districts N	1985-86 Districts %	1985-86 Students N	1985-86 Students %	1996-97 Districts N	1996-97 Districts %	1996-97 Students N	1996-97 Students %
<250	52	11.9%	10,124	2.1%	24	6.3%	4,818	1.0%
250-399	90	20.6	29,060	6.0	46	12.1	15,324	3.0
400-599	94	21.5	46,544	9.6	76	20.1	37,699	7.4
600-999	97	22.2	72,595	15.0	116	30.6	88,577	17.5
1,000-2,499	72	16.5	109,551	22.5	83	21.9	126,738	25.1
2,500-7,499	24	5.5	95,189	19.6	25	6.6	99,427	19.7
7,500+	8	1.8	122,269	25.2	9	2.4	133,004	26.3
State	437		485,332		379		505,587	

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT FILES.

The average enrollment in 1996-97 was 1,334 compared to 1,314 in 1995-96 and 1,118 in 1985-86. The largest school district in 1996-97 enrolled 32,033, while the smallest district enrolled 116 students. The median enrollment in 1996-97 was 695 compared to 684 in the previous year and 560 in 1985-86.

Approved Nonpublic Schools

In the 1996-97 school year there were 213 approved nonpublic schools. Three of these schools were K-12 schools, 30 operated high schools and 55 and 51 schools were K-8 and PK-8 respectively. The total number of approved nonpublic schools was up slightly over the previous years figures of 206, but has remained relatively constant over the past several years.

In 1985-86 nonpublic enrollment accounted for 9.2 percent of Iowa's total school enrollment. This figure decreased to 8.1 percent in 1996-97.

Ethnic Distribution of Students

In 1985-86 public school minority student enrollment in grades PK-12 comprised 4.6 percent of the total enrollment and increased to 7.8 percent in 1996-97 (Table 5). Hispanic student enrollment has shown the most rapid growth among minority groups, increasing more than 189 percent from 1985-86 to 1996-97. In addition, Hispanic enrollment increased more than 14 percent over the previous school year. Majority student enrollment declined .3 percent in 1996-97 over the previous year and was down .1 percent from the 1985-86 base year figure.

Table 5

IOWA PUBLIC SCHOOL ENROLLMENTS BY RACIAL/ETHNIC GROUP
1985-86, 1995-96 AND 1996-97

Racial/ Ethnic Group	1985-86		1995-96		1996-97		%Change 95-96 to 96-97	%Change 85-86 to 96-97
	N	%	N	%	N	%		
American Indian	1,090	.2%	2,199	.4%	2,255	0.5%	2.5%	106.9%
Hispanic	4,069	.8	10,302	2.1	11,774	2.3	14.3	189.4
Asian	5,310	1.1	7,658	1.5	7,953	1.6	3.8	49.8
African American	12,308	2.5	16,483	3.3	17,177	3.4	4.2	39.6
White	462,555	95.4	463,654	92.7	462,053	92.2	-0.3	-0.1

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILES (INCLUDES PK-GRADE 12 AND UNGRADED SPECIAL EDUCATION STUDENTS)

Nonpublic school enrollments displayed in Table 6 also reflect substantial increases in minority enrollments over the period from 1985-86 to 1996-97. African American enrollments showed the most accelerated growth for the period, increasing more than 90 percent. African American enrollment was also up 14.5 percent in 1996-97 from the previous school year.

Table 6

IOWA NONPUBLIC SCHOOL ENROLLMENTS BY RACIAL/ETHNIC GROUP
1985-86, 1995-96 AND 1996-97

Racial/ Ethnic Group	1985-86		1995-96		1996-97		%Change 95-96 to 96-97	%Change 85-86 to 96-97
	N	%	N	%	N	%		
American Indian	42	.1%	64	.1%	59	0.1%	-7.8%	40.5%
Hispanic	527	1.1	691	1.5	744	1.6	7.7	41.2
Asian	344	.7	485	1.0	496	1.1	2.3	44.2
African American	273	.6	455	1.0	521	1.1	14.5	90.8
White	48,372	97.5	45,222	96.4	45,238	96.1	0.04	-6.5

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILE (INCLUDES PK-GRADE 12 STUDENTS)

Table 7

Enrollment in public elementary and secondary schools, by race/ethnicity and state: Fall 1986 and Fall 1994

State or other area	Percent distribution, fall 1986		Percent distribution, fall 1994						Minority Enrollment Change 1986 to 1994
	White[1]	Total Minority	White[1]	Total Minority	African American	Hispanic	Asian	American Indian	
United States	**70.4**	**29.6**	**[2]65.6**	**34.4**	**[2]16.7**	**[2]13.0**	**[2]3.6**	**[2]1.1**	**+4.8**
Alabama	62.0	38.0	62.3	37.7	35.8	0.4	0.6	0.8	-0.3
Alaska	65.7	34.3	64.7	35.3	4.8	2.6	4.1	23.8	+1.0
Arizona	62.2	37.8	58.4	41.6	4.3	28.7	1.7	7.0	+3.8
Arkansas	74.7	25.3	73.9	26.1	23.9	1.1	0.7	0.3	+0.8
California	53.7	46.3	41.4	58.6	8.7	37.9	11.2	0.9	+12.3
Colorado	78.7	21.3	73.5	26.5	5.4	17.6	2.5	1.0	+5.2
Connecticut	77.2	22.8	72.7	27.3	13.3	11.4	2.4	0.2	+4.5
Delaware	68.3	31.7	65.4	34.6	29.1	3.6	1.7	0.2	+2.9
District of Columbia	4.0	96.0	4.0	96.0	88.0	6.6	1.3	[3]	0
Florida	65.4	34.6	58.7	41.3	25.0	14.4	1.7	0.2	+6.7
Georgia	60.7	39.3	59.1	40.9	37.5	1.8	1.5	0.1	+1.6
Hawaii	23.5	76.5	23.2	76.8	2.7	4.9	68.8	0.4	+0.3
Idaho	92.6	7.4	—	—	—	—	—	—	—
Illinois	69.8	30.2	64.4	35.6	21.0	11.6	3.0	0.1	+5.4
Indiana	88.7	11.3	85.7	14.3	11.2	2.2	0.8	0.2	+3.0
Iowa	**94.6**	**5.4**	**93.1**	**6.9**	**3.2**	**1.8**	**1.5**	**0.4**	**+1.5**
Kansas	85.6	14.4	83.0	17.0	8.4	5.7	1.9	1.0	+2.6
Kentucky	89.2	10.8	89.3	10.7	9.7	0.3	0.6	0.1	-0.1
Louisiana	56.5	43.5	51.5	48.5	45.7	1.1	1.3	0.5	+5.0
Maine	98.3	1.7	97.5	2.5	0.7	0.4	0.8	0.5	+0.8
Maryland	59.7	40.3	58.1	41.9	34.7	3.1	3.8	0.3	+1.6
Massachusetts	83.7	16.3	79.1	20.9	8.0	9.0	3.7	0.2	+4.6
Michigan	76.4	23.6	77.4	22.6	17.5	2.6	1.5	1.1	-1.0
Minnesota	93.9	6.1	88.1	11.9	4.5	1.8	3.7	1.9	+5.8
Mississippi	43.9	56.1	47.8	52.2	50.9	0.3	0.5	0.4	-3.9
Missouri	83.4	16.6	82.2	17.8	15.8	0.9	1.0	0.2	+1.2
Montana	92.7	7.3	87.7	12.3	0.5	1.4	0.8	9.6	+5.0
Nebraska	91.4	8.6	87.8	12.2	5.8	3.8	1.2	1.3	+3.6
Nevada	77.4	22.6	69.0	31.0	9.3	15.5	4.2	2.0	+8.4
New Hampshire	98.0	2.0	96.8	3.2	0.8	1.1	1.0	0.2	+1.2
New Jersey	69.1	30.9	63.0	37.0	18.6	13.1	5.2	0.2	+6.1
New Mexico	43.1	56.9	39.9	60.1	2.4	46.4	1.0	10.4	+3.2
New York	68.4	31.6	57.7	43.3	20.2	16.9	4.8	0.4	+10.7
North Carolina	68.4	31.6	65.2	34.8	30.5	1.5	1.2	1.5	+3.2
North Dakota	92.4	7.6	90.1	9.9	0.8	0.8	0.7	7.6	+2.3
Ohio	83.1	16.9	82.5	17.5	15.1	1.4	1.0	0.1	+0.6
Oklahoma	79.0	21.0	70.4	29.6	10.4	3.7	1.2	14.3	+8.6
Oregon	89.8	10.2	86.0	14.0	2.5	6.3	3.2	1.9	+3.8
Pennsylvania	84.4	15.6	80.9	19.1	13.9	3.4	1.7	0.1	+3.5
Rhode Island	87.9	12.1	79.9	20.1	7.0	9.5	3.2	0.5	+8.0
South Carolina	54.6	45.4	56.8	43.2	41.7	0.6	0.7	0.2	-2.2
South Dakota	90.6	9.4	84.2	15.8	0.8	0.7	0.8	13.6	+6.4
Tennessee	76.5	23.5	75.4	24.6	23.0	0.6	0.9	0.1	+1.1
Texas	51.0	49.0	47.1	52.9	14.3	36.1	2.3	0.2	+3.9
Utah	93.7	6.3	91.0	9.0	0.7	4.8	2.1	1.4	+2.7
Vermont	98.4	1.6	97.5	2.5	0.7	0.3	0.9	0.5	+0.9
Virginia	72.6	27.4	67.2	32.8	26.2	3.0	3.4	0.2	+5.4
Washington	84.5	15.5	79.1	20.9	4.6	7.4	6.3	2.6	+5.4
West Virginia	95.9	4.1	95.3	4.7	3.9	0.2	0.4	0.1	+0.6
Wisconsin	86.6	13.4	83.7	16.3	9.3	3.1	2.6	1.3	+2.9
Wyoming	90.7	9.3	89.4	10.6	1.0	6.1	0.8	2.8	+1.3
Other Areas									
American Samoa	—	—	[3]	—	[3]	[3]	100.0	[3]	—
Guam	—	—	8.3	—	1.8	0.5	89.3	0.1	—
Northern Marianas	—	—	1.0	—	[3]	[3]	98.2	0.8	—
Puerto Rico	—	—	[3]	—	[3]	100.0	[3]	[3]	—
Virgin Islands	—	—	1.1	—	85.4	13.1	0.5	[3]	—

1 Excludes persons of Hispanic origin.
2 Includes estimates for nonreporting state.
3 Less than 0.05 percent.
— Data not available.

SOURCE: U.S. Department of Education, Digest of Education Statistics, 1996.

The racial/ethnic distribution for public schools for the nation and for individual states is reflected in Table 7. Data included in Table 7 are for the fall of 1986 and fall of 1994. For the nation, the percentage of minority enrollment has increased fall to fall from 29.6 percent in 1986, to 34.4 percent in 1994. The average change in minority enrollment for the period was 4.8 percent. The median change for the period was 2.9 percent. During this time period Iowa's minority enrollment increased 1.5 percentage points.

According to figures from the U.S. Office of Education, Iowa had 6.9 percent minority students in 1994. This ranked Iowa the fifth lowest in the country. Over the period from 1986 to 1994 forty-four states experienced increases in minority enrollments, five states experienced decreases and one state remained unchanged.

Weighted Non-English Speaking Students and Limited English Proficient Students

Students whose primary language is not English are considered here in two categories. One category includes those public school students who generate additional money for their education through a weighted student count. Students are eligible to generate additional dollars for a given school district for up to three years. In the 1996-97 school year almost 70 percent of students whose primary language was not English were weighted.

The other category, which includes more students, whose primary language is not English includes both weighted and non-weighted students as well as nonpublic students. For the purpose of this report these students are referred to as limited English proficient students.

Weighted Non-English Speaking Students

Table 8 reflects weighted student counts for the years 1993-94, 1995-96, and 1996-97. Since 1993-94 the weighted non-English speaking student count has increased 38.1 percent statewide. The number of weighted non-English speaking students increased 7.8 percent in 1996-97 over the previous year. The largest percentage increase in the growth of weighted non-English speaking students from 1993-94 to 1996-97, occurred for districts with enrollments of 600-999. Since 1993-94, districts with enrollments under 250 experienced a 35.3 percent loss in the number of weighted non-English speaking students.

Table 8

DISTRIBUTION OF IOWA WEIGHTED NON-ENGLISH SPEAKING PUBLIC SCHOOL STUDENTS[1] BY ENROLLMENT CATEGORY — 1993-94, 1995-96, AND 1996-97

	1993-94		1995-96		1996-97			
Enrollment Category	Basic Enrollment Total	Non-English Enrollment	Basic Enrollment Total	Non-English Enrollment	Basic Enrollment Total	Non-English Enrollment	% Change 93-94 to 96-97	% Change 95-96 to 96-97
<250	6,956	17	5,276	43	4,818	11	-35.3%	-74.4%
250-399	17,794	21	16,708	24	15,324	40	90.5	66.7
400-599	47,617	72	40,248	97	37,699	101	40.3	4.1
600-999	79,260	229	82,130	473	88,577	500	118.3	5.7
1,000-2,499	119,988	706	128,363	818	126,738	948	34.3	15.9
2,500-7,499	94,422	488	99,023	799	99,427	878	79.9	9.9
7,500+	130,970	2,252	132,757	2,595	133,004	2,750	22.1	6.0
State	497,007	3,785	504,505	4,849	505,587	5,228	38.1	7.8

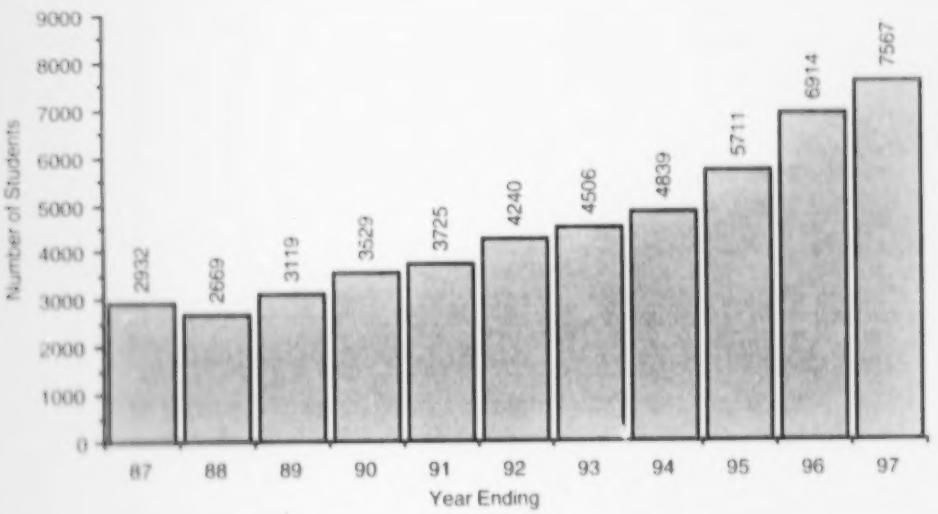
SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL ENROLLMENT REPORTS, 1993-94, 1995-96, AND 1996-97

NOTE: [1]FIGURES REPRESENT A COUNT OF NON-ENGLISH SPEAKING STUDENTS ELIGIBLE FOR GENERATING ADDITIONAL FUNDS FOR THEIR EDUCATION.

From 1995-96 to 1996-97 weighted, non-English speaking student increases accounted for about 35 percent of the total increase in certified enrollment for the same period.

Figure 1

TRENDS IN ENROLLMENTS OF LIMITED ENGLISH PROFICIENT PUBLIC AND NONPUBLIC STUDENTS IN IOWA 1986-87 TO 1996-97



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, LIMITED ENGLISH PROFICIENT DATA FILE.

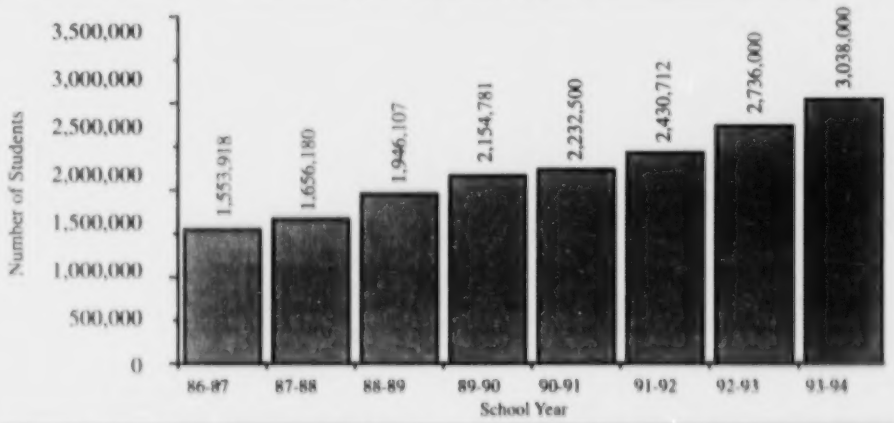
Limited English Proficient Students

The growth of Iowa's public and nonpublic limited English proficient students is reflected in Figure 1. The total number of limited English proficient students in Iowa's public and nonpublic schools was more than 2.5 times higher in 1996-97 than in 1986-87. Substantial percentage increases in limited English proficient enrollment occurred between 1993-94 and 1994-95 and between 1994-95 and 1995-96, 18 and 21 percent respectively.

Iowa's limited English proficient student growth parallels the pattern nationally, as reflected in Figure 2. In 1996-97 Iowa's limited English proficient enrollment increased by 9.4 percent over the previous school year. Des Moines and Sioux City reported the largest limited English proficient enrollments, 1,671 and 1,558 respectively. A total of 7,567 limited English proficient students were reported statewide. The combined Des Moines and Sioux City limited English proficient enrollments accounted for nearly 43 percent of the state's limited English proficient enrollment.

Figure 2

TRENDS IN ENROLLMENTS OF LIMITED ENGLISH PROFICIENT PUBLIC AND NONPUBLIC STUDENTS IN THE NATION 1986-87 TO 1993-94



SOURCE: DOLSON, B., ET. AL. (1995). *SUMMARY OF BILINGUAL EDUCATION STATE EDUCATIONAL AGENCY PROGRAM SURVEY OF STATES' LEP PERSONS AND AVAILABLE EDUCATIONAL SERVICES 1993-94*.

NOTE: PREPARED UNDER CONTRACT FOR THE U.S. DEPARTMENT OF EDUCATION BY DEVELOPMENT ASSOCIATES, INC.: ARLINGTON, VA.

Open Enrollment

Nearly 14,000 Iowa public school students exercised open enrollment options in 1996-97. This is up from about 12,000 in 1995-96. Table 9 displays the net change in open enrollment for 1990-91 through 1996-97 by enrollment category. For each year shown the net change in open enrollment resulted in losses for districts with enrollments under 400 and for the largest enrollment category districts and net increases resulted for districts with enrollments of 1,000 to 7,499.

Table 9

NET OPEN ENROLLMENT CHANGE IN IOWA PUBLIC SCHOOLS BY ENROLLMENT CATEGROY 1990-91, 1993-94 TO 1996-97

	Net Enrollment Change					Open Enrollment Out
Enrollment Category	1990-1991	1993-1994	1994-1995	1995-1996	1996-1997	1996-1997
<250	-236	-432	-454	-539	-509	642
250-399	-264	-477	-475	-462	-440	1,083
400-599	-50	+112	+84	+216	+368	1,457
600-999	+66	-83	-20	+59	-17	3,254
1,000-2,499	+370	+1,025	+1,143	+1,101	+1,121	2,920
2,500-7,499	+45	+379	+467	+633	+515	2,223
7,500+	-67	-693	-832	-1,087	-1,124	2,354

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT FILES, 1990-91, 1993-94 TO 1996-97.

Early Childhood Education

In the 1995-96 school year 148 public school districts, 38.5 percent, reported that they offered preschool programs to students. All districts with enrollments of 7,500 and above offered preschool programs. Sixty percent of districts with enrollments of 2,500-7,499 provided preschool programs and nearly 58 percent of district with enrollments under 250 reported offering preschool programs. According to information provided by public school districts a total of 5,398 children were served in preschool programs in 1995-96 (Table 10). More than 67 percent of children served were served in districts with enrollments of 1,000 and above.

Table 10

Iowa Public School Preschool Programs Offered and Preschool and Kindergarten Enrollments by Enrollment Category — 1995-96

Enrollment Category	Number District	Number of Districts Offering Preschool Programs		Number of Children in Preschool Programs		Number of Kndrgrtn Children	Preschool Children as a Percent of Kndrgrtn Children
		Number	%	Number	%		
<250	26	15	57.7%	149	2.8%	295	50.5%
250-399	50	23	46.0	364	6.7	1,031	35.3
400-599	81	26	32.1	501	9.3	2,669	18.8
600-999	108	29	26.8	731	13.5	6,354	11.5
1,000-2,499	85	31	36.5	840	15.6	9,375	9.0
2,500-7,499	25	15	60.0	653	12.1	7,245	9.0
7,500+	9	9	100.0	2,160	40.0	10,132	21.3
State	384	148	38.5	5,398	100.0	37,101	14.5

Source: Iowa Department of Education, Basic Educational Data Survey, Early Childhood Education File.

Assuming an equal distribution of the early childhood population across school districts, examining the ratio of preschool children to kindergarten children provides an indicator of the proportion of preschool children being served in preschool programs. Table 10 reflects that 14.5 percent of preschoolers were served by public school districts in 1995-96 compared to an estimated 17 percent statewide in 1994-95. Districts with enrollments under 250 served an estimated 50.5 percent as judged by the comparison of preschool children to kindergarten children.

Current and historical information on the number and percent of public school districts offering all day, everyday, two semester kindergarten programs is presented in Table 11. The percent of school districts offering all day, everyday, two semester programs for kindergarten increased from about 25 percent in 1985-86 to more than 68 percent in 1996-97. Percentages have increased steadily each year across the period.

Table 11

Number and Percent of Iowa Public School Districts Offering All-Day, Everyday, Two Semester Kindergarten Programs — 1985-86 - 1996-97

Year	Number of Districts	Percent of Districts
1985-1986	110	25.2%
1986-1987	120	27.5
1987-1988	134	30.7
1988-1989	151	34.9
1989-1990	163	37.8
1990-1991	180	41.9
1991-1992	199	46.8
1992-1993	219	52.4
1993-1994	228	57.4
1994-1995	242	62.1
1995-1996	257	66.9
1996-1997	258	68.1

Source: Iowa Department of Education, Basic Educational Data Survey, Policies and Procedures Files.

Table 12 depicts all day, everyday, two semester kindergarten programs by enrollment category. The data indicate that between 72 and 80 percent of districts with enrollments under 1,000 offer this kindergarten program type. No districts with enrollments of 7,500 and above reported offering all day, everyday, two semester kindergarten programs as their primary kindergarten program type and 28 percent of districts with enrollments of 2,500-7,499 reported having all day, everyday, two semester programs as their primary program type.

Table 12

Iowa Public School Kindergarten Program Type — 1996-97

		Kindergarten Program Type		
		All-Day, Everyday, Two Semesters		All Others
Enrollment Category	Number of Districts	Number of Districts	Percent in Category	Number of Districts
<250	24*	19	79.2%	4
250-399	46	37	80.4	9
400-599	76	55	72.4	21
600-999	116	89	76.7	27
1,000-2,499	83	51	61.4	32
2,500-7,499	25	7	28.0	18
7,500+	9	0	0.0	9
State	379	258	68.1	120

Source: Iowa Department of Education, Basic Educational Data Survey, 1995-96, Policies & Procedures File.
Note: *One district tuitions all students to another district.

Special Education Enrollments

Special education enrollments in Iowa public schools have increased by nearly 16,000 students since 1985-86, an increase of 38.1 percent (Table 13). In 1985-86 special education enrollments in Iowa schools represented 8.63 percent of the total certified enrollments in the public schools and in 1996-97 special education student representation increased to 11.44 percent of the total certified enrollment. Total certified enrollment over the same time period increased a total of 4.2 percent and reflected an absolute increase of 20,255 students.

Table 13

Special Education Enrollment in Iowa Public Schools 1985-86 through 1996-97

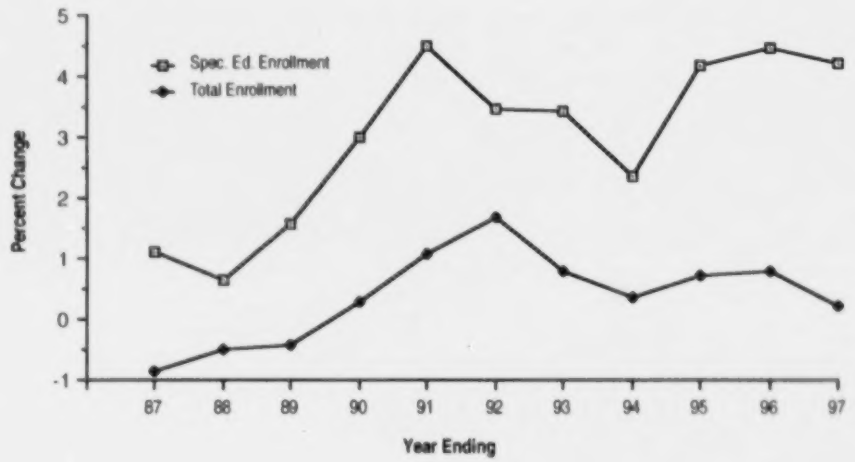
Year	Certified Enrollment	Annual % Change in Cert. Enrollment	Special Education Enrollment	Annual % Change in Spec. Ed. Enrollment	Special Ed. as % of Cert. Enrollment
1985-1986	485,332	—	41,892	—	8.63%
1986-1987	481,205	-0.85%	42,360	1.12%	8.80%
1987-1988	478,859	-0.49%	42,625	0.63%	8.90%
1988-1989	476,771	-0.44%	43,290	1.56%	9.08%
1989-1990	478,210	0.30%	44,585	2.99%	9.32%
1990-1991	483,396	1.08%	46,593	4.50%	9.64%
1991-1992	491,451	1.67%	48,201	3.45%	9.81%
1992-1993	495,342	0.79%	49,848	3.42%	10.06%
1993-1994	497,009	0.34%	51,022	2.36%	10.27%
1994-1995	500,592	0.72%	53,151	4.17%	10.62%
1995-1996	504,505	0.78%	55,514	4.45%	11.00%
1996-1997	505,587	0.21%	57,845	4.20%	11.44%

Source: Iowa Department of Education, Certified Enrollment Files and December 1 Special Education Certified Enrollment files.

Figure 3 represents annual percentage changes in total certified enrollments compared to changes in special education enrollments.

Figure 3

PERCENT CHANGE FROM THE PREVIOUS YEAR IN IOWA PUBLIC SCHOOLS SPECIAL EDUCATION AND TOTAL ENROLLMENTS 1986-87 THROUGH 1996-97



SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT FILES AND DECEMBER 1 SPECIAL EDUCATION CERTIFIED ENROLLMENT FILES.

Staff

The staff portion of the *Condition of Education Report* offers information on the characteristics of teachers, principals, and superintendents in public and nonpublic schools. Information is also provided on area education agency staff. In addition, information on teacher assignments, instructional aides, and pupil-teacher ratios is presented. Staff characteristics which are presented include age, experience, gender, racial/ethnic distributions, and advanced degrees. Information is provided for the two most recent years as well as for 1985-86. Comparisons are made by enrollment category and on a national and regional basis where data are available.

Certificated Staff

In 1996-97 full and part-time certificated staff in public and nonpublic schools and in area education agencies totaled over 44,000. These staff provided services to almost 550,000 students.

Teachers' Characteristics

In 1996-97 there were more than 31,600 full-time teachers employed in the public schools, up 1.4 percent from the previous school year. The number of full-time nonpublic school teachers remained unchanged at 2,363 (Table 14).

Table 14

CHARACTERISTICS OF IOWA FULL-TIME TEACHERS
1985-86, 1995-96, AND 1996-97

Characteristics	Public			Nonpublic		
	85-86	95-96	96-97	85-86	95-96	96-97
Average Age	39.9	42.2	42.3	36.6	38.9	39.1
Percent Female	63.5	68.1	68.5	77.5	79.3	78.8
Percent Minority	1.2	1.5	1.6	.5	.7	.8
Percent Advanced Degree	29.0	28.1	27.8	16.0	12.2	12.0
Average Total Experience	13.9	15.9	15.8	11.0	11.9	12.1
Average District Experience	10.6	12.3	12.3	5.7	7.8	8.0
Number of Full-Time Teachers	30,499	31,193	31,629	2,419	2,363	2,363

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES. (INCLUDES AEA TEACHERS).

In the public schools 68.5 percent of teachers were women, compared to 63.5 percent in 1985-86 and 68.1 percent in the previous school year. The percentage of women teaching in nonpublic schools was nearly 79 percent in 1996-97, increasing from 77.5 percent in 1985-86. Average total experience for public school teachers was nearly 16 years, compared to about 12 years for nonpublic teachers. About 28 percent of public school teachers held advanced degrees, compared to 12 percent for nonpublic teachers. The percentage of teachers with advanced degrees decreased slightly for public school teachers since 1985-86 and was down four percentage points for the period for nonpublic teachers. The percentage of minority teachers in both public and nonpublic schools remained essentially unchanged from 1985-86 to 1996-97 at about 1.5 percent for public and under one percent for nonpublic schools.

Teachers' Salaries

Teacher salaries are defined as the total contract salary as reported on the Basic Educational Data Survey. These salaries may include amounts paid to teachers for additional, non-teaching assignments such as coaching or yearbook supervision, etc.

Table 15 provides a comparison of the salaries for Iowa full-time public school teachers for 1996-97, 1995-96, and for the base year 1985-86. Statewide, teacher salaries in 1996-97 are up more than 53 percent from the base year and are up 2.8 percent compared to the previous year. Increases in the average salary for teachers in districts under 250 enrollment amounted to 1.4 percent in 1996-97, compared to 3.4 percent for teachers in districts with enrollments of 7,500 and above. The range in average salaries across enrollment categories was $11,824 in 1996-97, compared to $7,694 in 1985-86. The average salary for teachers in the smallest districts, as a percent of the average salary of teachers in the largest districts, has declined over the past two years from 69.4 percent in 1994-95 to 68.7 percent in 1995-96 to the current 67.4 percent in 1996-97. In 1985-86, teachers in the smallest enrollment category earned, on average, 68 percent of the salary paid to teachers in the largest districts. Salary differences are primarily due to differences in experience and degree status.

Table 15

Average Salaries, Advanced Degree, and Total Experience Distribution of Iowa Full-Time Public School Teachers by Enrollment Category

Enrollment Category	1985-86	1995-96*	1996-97*	% Salary Change 1985-86 to 1996-97	% with Advanced Degree 1996-97	Average Total Experience 1996-97
<250	$16,347	$24,089	$24,418	49.4%	8.6%	10.6
250-399	17,971	26,759	27,332	52.1	13.3	13.7
400-599	19,198	28,606	29,182	52.0	14.0	14.5
600-999	20,079	29,639	30,366	51.2	18.1	15.1
1,000-2,499	21,616	32,304	33,095	53.1	24.5	16.3
2,500-7,499	23,835	34,983	35,918	50.7	34.1	16.7
7,500+	24,041	35,041	36,242	50.8	40.2	16.4
State	21,690	32,376	33,275	53.4	27.8	15.8

SOURCE: Iowa Department of Education, Basic Educational Data Survey, Staff Files, 1985-86, 1995-96, and 1996-97.
NOTE: *Does not include Phase III funds.

Table 16 and Figure 4 provide a comparison of average teacher salaries for 1993-94 to 1995-96 with average salaries of other midwestern states. Iowa ranked sixth out of the nine states shown. The range in average salaries across the nine states was $14,573. Average teacher salaries for Iowa were $5,313 below the average for the nation. Average salaries for Iowa represented about 86 percent of the national average.

Table 16

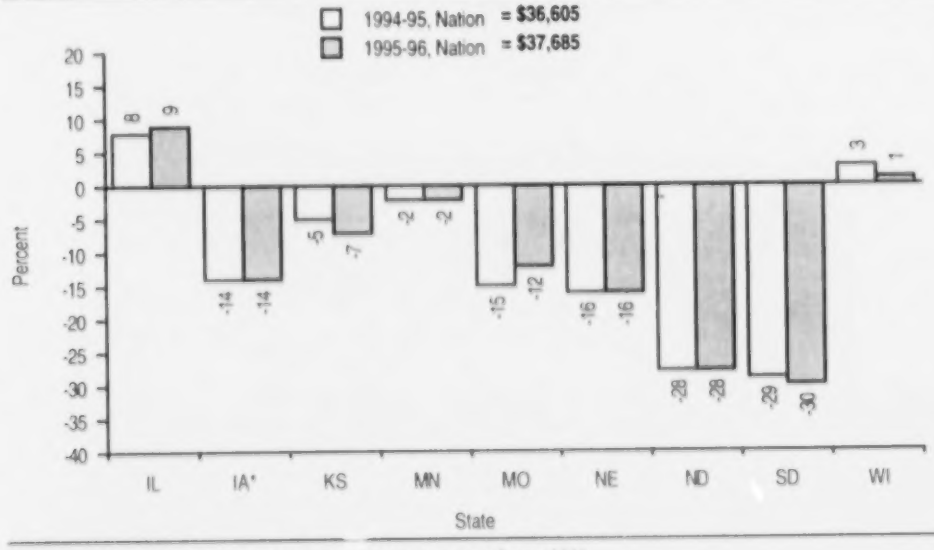
AVERAGE SALARIES OF PUBLIC SCHOOL TEACHERS FOR IOWA AND MIDWEST STATES 1994-95 AND 1995-96

Nation and State	1994-95	Rank	1995-96	Rank
Nation	$36,605		37,685	
Iowa*	**31,511**	**34**	**32,372**	**34**
Illinois	39,431	12	40,919	12
Kansas	34,652	24	35,134	25
Minnesota	35,948	20	36,937**	19
Missouri	31,189	37	33,341	28
Nebraska	30,922	39	31,496	39
North Dakota	26,327	50	26,969	49
South Dakota	25,994	51	26,346	51
Wisconsin	37,746	16	38,182	15

SOURCE: NATIONAL EDUCATION ASSOCIATION, RANKINGS OF THE STATES 1996.
NOTES: *DOES NOT INCLUDE PHASE III FUNDS. **DATA ESTIMATED BY NEA.

Figure 4

IOWA AND MIDWEST STATES
PERCENT ABOVE OR BELOW NATIONAL AVERAGE TEACHER SALARY
1994-95 AND 1995-96



SOURCE: NATIONAL EDUCATION ASSOCIATION, RANKINGS OF THE STATES 1996.
NOTES: *DOES NOT INCLUDE PHASE III FUNDS.

Teachers' Assignments

Assignments for public secondary school teachers in grades 9-12 were examined in the areas of English/language arts, mathematics, and science. Data for these assignments are reflected in Tables 17 to 19 and in Figures 5 and 6. Table 17 provides a comparison of the percentages of full-time teachers with majors in English/language arts and the percentage who teach English/language arts exclusively. Data are provided for 1985-86, 1995-96, and 1996-97. For the state as a whole, the percentage of teachers with exclusive English/language arts assignments who have English/language arts majors has increased from 64.3 percent in 1985-86, to 73.7 percent in 1996-97. Figures for 1996-97 also represent an increase over the previous school year. No pattern in the percentages of teachers who taught English/language arts exclusively and had English/language arts majors was apparent across enrollment categories.

The percentage of teachers teaching English/language arts courses exclusively decreased slightly from 1985-86 to 1996-97, from 59.9 percent to 56.4 percent, and showed a one percentage point increase in 1996-97 over the previous year. The percentage of teachers with exclusive English/language arts assignments was substantially higher in enrollment categories with enrollments of 1,000 or more than in categories under 1,000 enrollment.

Table 17

Iowa Full-Time Teachers with English/Language Arts Assignments in Public Secondary Schools by Enrollment Category

	1985-86			1995-96			1996-97		
Enrollment Category	Number of Teachers	% Exclusive* English Teacher	% with major in English**	Number of Teachers	% Exclusive* English Teacher	% with major in English**	Number of Teachers	% Exclusive* English Teacher	% with major in English**
<250	111	17.1%	52.6%	21	42.9%	77.8%	20	40.0%	75.0%
250-399	264	35.2	57.0	106	43.4	78.3	97	38.1	81.1
400-599	453	46.4	59.0	265	38.5	71.6	249	40.2	77.0
600-999	584	54.3	64.7	442	43.2	78.5	478	44.1	75.8
1,000-2,499	807	65.3	63.2	582	62.5	71.4	571	63.0	74.2
2,500-7,499	566	69.8	65.3	377	67.9	73.8	367	67.6	75.8
7,500+	765	74.1	67.9	604	59.8	71.2	592	63.3	69.1
State	3,550	59.9	64.3	2,397	55.4	73.1	2,374	56.4	73.7

SOURCE: Iowa Department of Education, Basic Educational Data Survey, Staff Files.
NOTES: *Percent of English/Language Arts teachers who teach only English/Language Arts.
**Percent of exclusive English/Language Arts teachers who have a major in English/Language Arts.

Mathematics teaching assignments are presented in Table 18. Statewide, the percentage of teachers teaching mathematics exclusively who possessed a major in mathematics decreased slightly from 1985-86 to 1996-97, from 80.2 percent to 79.4 percent. Across enrollment categories the highest percentage of mathematics teachers with mathematics majors were from districts under 250 enrollment and the lowest percentage from districts with enrollments of 7,500 and above.

The percentage of mathematics teachers who teach mathematics courses exclusively has increased slightly statewide from 44 percent in 1985-86 to 46.1 percent in 1996-97. The 1996-97 figure reflects a slight increase over the previous year. A substantially higher percentage of mathematics teachers taught mathematics exclusively in enrollment categories of 1,000 and above than in enrollment categories with under 1,000 enrollment.

Table 18

Iowa Full-Time Teachers with Mathematics Assignments in Public Secondary Schools by Enrollment Category

	1985-86			1995-96			1996-97		
Enrollment Category	Number of Teachers	% Exclusive* Math Teacher	% with major in Math**	Number of Teachers	% Exclusive* Math Teacher	% with major in Math**	Number of Teachers	% Exclusive* Math Teacher	% with major in Math**
<250	67	14.9%	80.0%	14	28.6%	100.0%	12	33.3%	100.0%
250-399	160	25.6	75.6	90	30.0	92.6	84	32.1	92.6
400-599	203	31.5	87.5	207	31.4	87.7	188	33.0	83.9
600-999	264	31.1	85.4	364	30.2	78.2	390	30.8	79.2
1,000-2,499	355	45.1	86.9	476	50.6	82.6	465	49.0	84.2
2,500-7,499	275	56.7	82.1	291	61.5	77.1	291	59.8	82.8
7,500+	387	62.0	71.7	453	52.8	71.6	430	56.3	69.4
State	1,711	44.0	80.2	1,895	45.6	78.6	1,860	46.1	79.4

Source: Iowa Department of Education, Basic Educational Data Survey, Staff Files.
Notes: *Percent of Mathematics teachers who teach only Mathematics.
**Percent of exclusive Mathematics teachers who have a major in Mathematics.

Table 19

Iowa Full-Time Teachers with Science Assignments in Public Secondary Schools by Enrollment Category

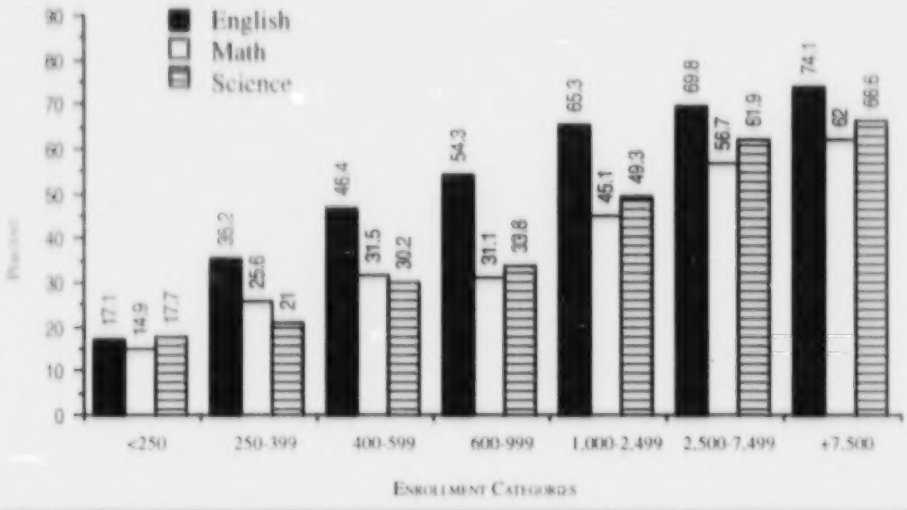
Enrollment Category	1985-86 Number of Teachers	1985-86 % Exclusive* Science Teacher	1985-86 % with major in Science**	1995-96 Number of Teachers	1995-96 % Exclusive* Science Teacher	1995-96 % with major in Science**	1996-97 Number of Teachers	1996-97 % Exclusive* Science Teacher	1996-97 % with major in Science**
<250	68	17.7%	100.0%	16	37.5%	100.0%	14	42.9%	100.0%
250-399	176	21.0	97.3	84	25.0	95.2	80	31.2	100.0
400-599	232	30.2	87.1	174	27.0	89.4	168	26.6	90.7
600-999	311	33.8	87.6	328	36.0	88.1	358	35.2	89.7
1,000-2,499	377	49.3	87.1	431	46.9	88.6	419	48.9	87.3
2,500-7,499	278	61.9	93.0	273	64.8	88.1	269	62.8	87.0
7,500+	326	66.6	85.7	406	62.1	75.8	403	65.3	75.7
State	1,768	45.2	88.7	1,712	48.1	84.8	1,711	48.9	84.6

Source: Iowa Department of Education, Basic Educational Data Survey, Staff Files.
Notes: *Percent of Science teachers who teach only Science.
**Percent of exclusive Science teachers who have a major in Science.

Assignments of science teachers are shown in Table 19. Statewide, the percentage of science teachers with science majors has decreased slightly from 1985-86 to 1996-97, dropping from 88.7 percent to 84.6 percent. In general, the percentage of science teachers who taught science exclusively has increased to nearly 49 percent from 45.2 percent in 1985-86. For the three years shown, the percentage of science teachers who taught science exclusively was substantially higher in enrollment categories of 2,500 and above than in other enrollment categories.

Figure 5

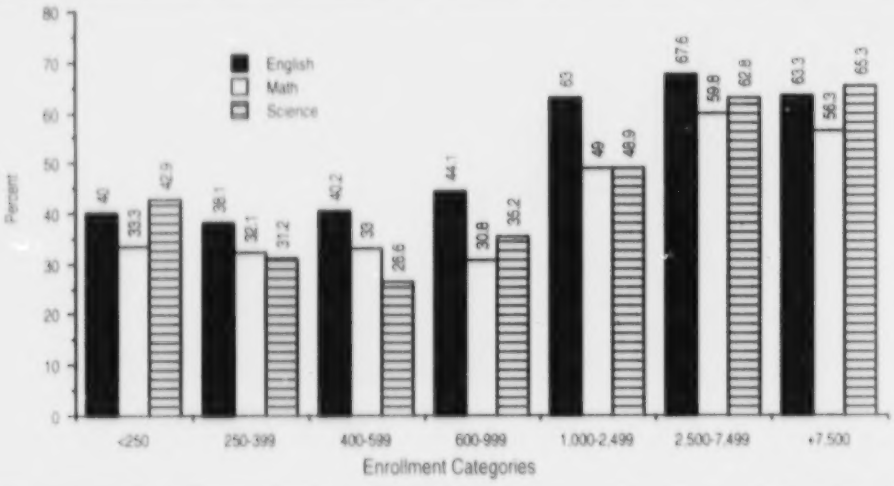
Percent of Iowa Teachers with Exclusive Assignments in English/Language Arts, Mathematics, and Science (1985-86)



Source: Iowa Department of Education, Basic Educational Data Survey, Staff File.

Figure 6

PERCENT OF IOWA TEACHERS WITH EXCLUSIVE ASSIGNMENTS IN ENGLISH/LANGUAGE ARTS, MATHEMATICS, AND SCIENCE (1996-97)



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILE, 1996-97.

Principals' Characteristics

In 1996-97, Iowa had a total of 1,332 public and nonpublic full-time principals, a decrease of nearly five percent from the base year of 1985-86. The characteristics of full-time principals are reflected in Table 20.

Table 20

CHARACTERISTICS OF IOWA FULL-TIME PRINCIPALS 1985-86, 1995-96, AND 1996-97

	Public			Nonpublic		
Characteristics	1985-86	1995-96	1996-97	1985-86	1995-96	1996-97
Average Age	46.6	47.1	47.4	46.0	48.2	47.9
Percent Female	8.7	23.7	25.8	49.5	45.9	44.8
Percent Minority	1.6	2.6	2.8	0	.7	0
Percent Advanced Degree	98.9	98.6	98.0	97.7	91.9	89.6
Average Total Experience	21.9	22.6	22.8	21.5	23.5	22.7
Number of Principals	1,223	1,196	1,198	177	136	134

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.

Average age of both public and nonpublic principals has increased from the 1985-86 base year to about 47½ years for public and nearly 48 years for nonpublic. The percentage of women principals in public schools has increased nearly threefold since 1985-86, rising from 8.7 percent to nearly 26 percent in 1996-97. The percentage of women principals in nonpublic schools, which has been substantially higher than in the public schools, decreased from nearly 50 percent in 1985-86 to about 45 percent in 1996-97. The percentage of minority principals has increased only slightly in the public schools and has been, for the most part, non-existent in nonpublic schools.

All but two percent of public school principals had advanced degrees in 1996-97 and nearly 90 percent of principals in nonpublic schools had advanced degrees. Total experience in education was roughly equal in public and nonpublic schools at nearly 23 years. The number of principals for both public and nonpublic schools has decreased since 1985-86.

Principals' Salaries

Statewide, public school principals' salaries increased by 3.9 percent over the previous school year, compared to a 2.8 percent increase for public school teachers, and a 3.9 percent increase for superintendents. The range in average salaries for principals was $23,900. Average salaries for principals increased with each successive increase in enrollment. Since 1985-86, the average salary for public school principals has increased from $35,313 to $55,231 or 56.4 percent compared to an increase of 53.4 percent for public school teachers (Table 21).

Table 21

AVERAGE SALARY OF IOWA FULL-TIME PUBLIC SCHOOL PRINCIPALS BY ENROLLMENT CATEGORY 1985-86, 1995-96 AND 1996-97

Enrollment Category	Average Salary 1985-86	1995-96	1996-97	% Change 1985-86 to 1996-97
<250	$26,399	$37,604	$39,440	49.4%
250-399	28,387	43,542	44,855	58.0
400-599	31,095	45,088	46,678	50.1
600-999	33,428	48,557	50,177	50.1
1,000-2,499	36,427	54,159	56,013	53.8
2,500-7,499	39,465	59,740	61,893	56.8
7,500+	39,584	60,621	63,340	60.0
State	35,313	53,160	55,231	56.4

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES

Superintendents' Characteristics

Characteristics of public school superintendents are reflected in Table 22. The average age of public school superintendents has increased by nearly three years since 1985-86 to 51.5 years. The percentage of female superintendents increased to 4.4 percent in 1996-97 from 1.6 percent in 1985-86, but continues to reflect a wide disparity compared to the percentages of female teachers and principals, which reflected 68.5 percent and 25.8 percent female representation respectively.

Average total experience in education has increased to 25.8 years, reflecting the increase in superintendents' age. Average tenure within a given school district continued to decrease from the 1985-86 base year, dropping from 8.8 years to 7.2 years in 1995-96 to an average of 6.7 years in 1996-97.

Table 22

Characteristics of Iowa Full-Time Public School Superintendents —1985-86, 1995-96, and 1996-97

Characteristics	1985-86	1995-96	1996-97
Average Age	48.7	51.2	51.5
Percent Female	1.6	3.6	4.4
Percent Minority	0	.9	1.2
Percent Specialists/Doctorate Degree	46.9	47.4	45.2
Average Total Experience	23.6	25.6	25.8
Average District Experience	8.8	7.2	6.7

Source: Iowa Department of Education, Basic Educational Data Survey, State Files.

Superintendents' Salaries

Table 23 depicts average salaries for public school superintendents by enrollment category for 1985-86, 1995-96, and 1996-97 school years. The average salary for full-time public school superintendents increased 3.9 percent from the previous year to $67,747. This represents an increase of 66.4 percent over the base year of 1985-86, compared to an overall increase of 56.4 percent for principals and 53.4 percent for teachers. The percentage increase in salaries of superintendents, principals, and teachers from 1990-91 to 1996-97 is shown in Figure 7. The range in average salaries for superintendents across enrollment categories was $53,404. As with average salaries for teachers and for principals, superintendents' salaries increased with successive increases in enrollment (Figure 8).

Table 23

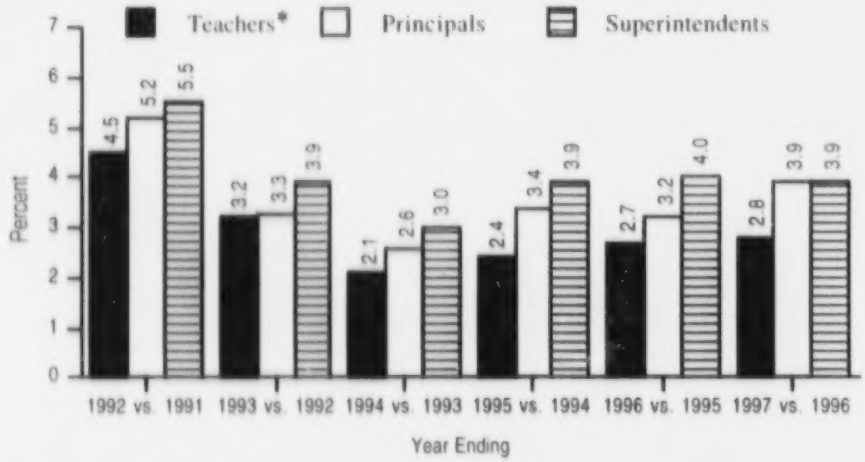
Average Salary of Iowa Full-Time Public School Superintendents by Enrollment Category 1985-86, 1995-96, and 1996-97

Enrollment Category	Average Salary 1985-86	1995-96	1996-97	% Change 1985-86 to 1996-97
<250	$33,597	$48,202	$51,112	52.1%
250-399	34,060	54,347	56,805	66.8
400-599	39,213	58,704	60,166	53.4
600-999	41,482	62,346	64,980	56.6
1,000-2,499	47,288	70,928	74,257	57.0
2,500-7,499	55,110	85,959	89,787	62.9
7,500+	62,235	98,265	104,516	67.9
State	40,710	65,205	67,747	66.4

Source: Iowa Department of Education, Basic Educational Data Survey, State Files.

Figure 7

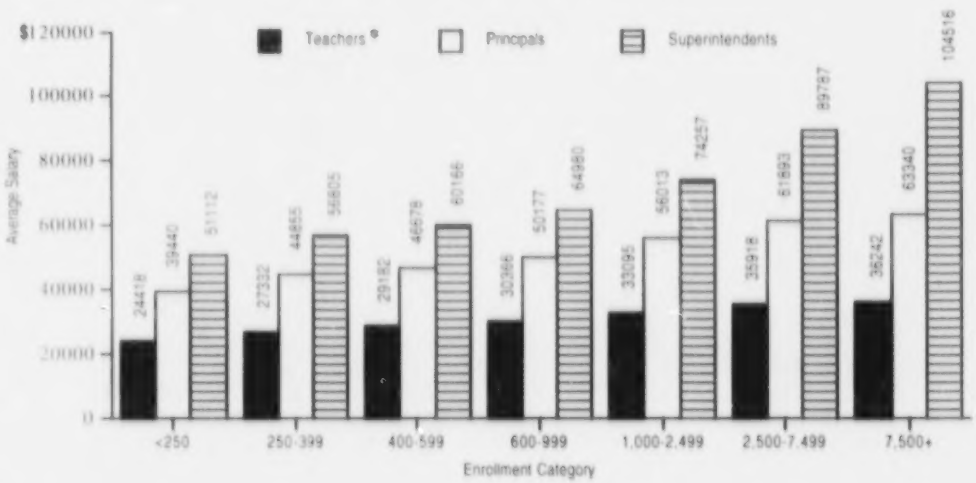
Percent Salary Increase from the Previous Year for Iowa Full-time Public School Superintendents, Principals, and Teachers 1990-1991 to 1996-1997



Source: Iowa Department of Education, Basic Educational Data Survey, Staff Files.
Note: *Does not include Phase III funds.

Figure 8

Average Salary of Iowa Full-Time Public School Superintendents, Principals and Teachers by Enrollment Category, 1996-97



Source: Iowa Department of Education, Basic Educational Data Survey, Staff File, 1996-97.
Note: *Does not include Phase III funds.

Gender Comparisons

Tables 24 and 25 compare characteristics of public school full-time teachers and principals. In terms of age, total experience, and average salary, female teachers as well as principals were slightly younger, had less experience and earned less money. While differences in degree status between male and female principals were essentially non-existent, more than one-third of male teachers held advanced degrees compared to nearly 25 percent for female teachers.

Table 24

Gender Comparison of Iowa Full-Time Public School Teachers — 1996-97

Characteristics	Female	Male
Average Age	42.1	42.7
Percent Minority	1.5	1.7
Percent Advanced Degree	24.9	34.1
Average Total Experience	15.0	17.7
Average District Experience	11.5	14.1
Average Salary*	$32,401	$35,177

Source: Iowa Department of Education, Basic Educational Data Survey, Staff File.
Note: *Does not include Phase III funds.

Table 25

Gender Comparison of Iowa Full-Time Public School Principals —1996-97

Characteristics	Female	Male
Average Age	46.0	47.8
Percent Minority	4.2	2.2
Percent Advanced Degree	98.4	97.9
Average Total Experience	20.1	23.7
Average District Experience	8.9	12.5
Average Salary	$53,746	$55,747

Source: Iowa Department of Education, Basic Educational Data Survey, Staff File.

Area Education Agencies (AEAs)

Iowa's public and nonpublic schools are served by fifteen area education agencies which provide three basic categories of services: special education, media, and other educational services.

Table 26 depicts the characteristics of Iowa's area education agencies full-time certificated staff. With respect to gender, age, and ethnic groups, the AEA staff resembles the public school teaching staff. The exceptions were that AEA staff, on the average, had nearly one year more experience, earned over $6,000 more than public school teachers and had a significantly higher percentage of staff with advanced degrees. Average salaries of AEA staff increased by 4.3 percent from the previous school year, compared to 2.8 percent for public school teachers and 3.9 percent for public school principals and superintendents.

Table 26

Characteristics of Iowa Full-Time Certificated AEA Staff 1996-97 School Year

Percent Men	28.9
Percent Women	71.1
Percent Minority	1.2
Percent staff with advanced degrees	74.3
Average years total experience	16.8
Average number of contract days	198.4
Average Age	44.4
Average Salary	$39,520

Source: Iowa Department of Education, Basic Educational Data Survey, Staff File, 1996-97.

The distribution of AEA full-time certificated staff is presented in Table 27 and in Figure 9. More than 42 percent of full-time certificated AEA staff were composed of clinicians, consultants, and school psychologists.

Table 27

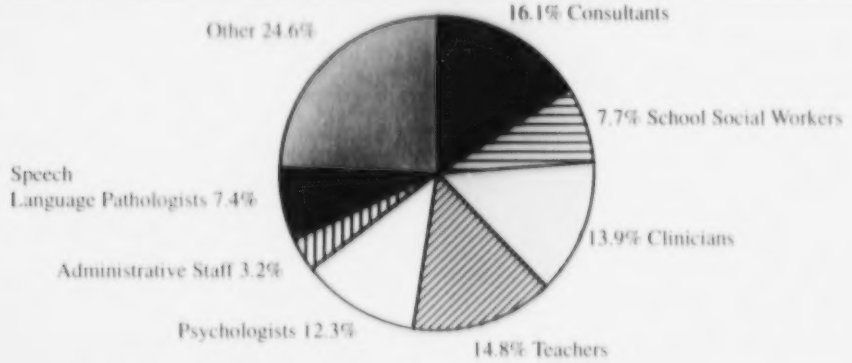
Number of Iowa Full-Time AEA Certificated Staff by Position, 1996-97

Position	Number	Percent
Administrative Assistant	2	0.1
Administrator	15	0.6
Assistant Dean/Director	11	0.4
Clinician	361	13.9
Consultant	419	16.1
Coordinator	88	3.4
Department Head	14	0.5
Director	41	1.6
Educational Strategist	6	0.2
Home Intervention PK Teacher	53	2.0
Hospital/Home Teacher	6	0.2
Instructor/Consultant	62	2.4
Integration Teacher	63	2.4
Itinerant Teacher	87	3.4
Librarian	9	0.4
Manager	1	<0.1
Pre School Teacher	23	0.9
Principal	4	0.2
Resource Teacher	124	4.8
School Audiologist Specialist	9	0.3
School Social Worker	201	7.7
School Psychologist	318	12.3
School Audio Consultant	16	0.6
Self-contained Special Education 2.2	142	5.5
Self-contained Special Education 3.6	106	4.1
Speech Language Pathologists	192	7.4
Specialist	36	1.4
Supervisor	64	2.5
Teacher	29	1.1
Therapist	93	3.6
Total	2,595	

Source: Iowa Department of Education, Basic Educational Data Survey, Staff File, 1996-97.

Figure 9

Percent of Iowa Full-Time AEA Certificated Staff by Position, 1996-97



Source: Iowa Department of Education, Basic Educational Data Survey, Staff File, 1996-97.
Note: Administrative staff includes administrative assistants, administrators, assistant dean/directors, directors, and principals.

Table 28 reflects the distribution of public school district enrollment and certificated staff by AEA. The three largest AEAs 9, 10, and 11 have 43.6 percent of the total certificated public school staff and 45 percent of the public school enrollment.

Table 28

DISTRIBUTION OF IOWA PUBLIC SCHOOL DISTRICTS, ENROLLMENT AND TOTAL FULL-TIME CERTIFICATED STAFF BY AEAs, 1996-97

AEA	Districts		Enrollment		Certificated Staff	
	N	%	N	%	N	%
1	25	6.6%	34,674	6.9%	2,705	6.6%
2	24	6.3	22,302	4.4	1,925	4.7
3	20	5.3	13,028	2.6	1,132	2.8
4	14	3.7	11,484	2.3	980	2.4
5	31	8.2	26,027	5.1	2,292	5.6
6	16	4.2	17,202	3.4	1,459	3.6
7	24	6.3	32,504	6.4	2,679	6.6
9	22	5.8	51,955	10.3	4,129	10.1
10	33	8.7	62,493	12.4	4,857	11.9
11	56	14.8	112,940	22.3	8,790	21.6
12	24	6.3	31,399	6.2	2,541	6.2
13	31	8.2	33,656	6.6	2,707	6.6
14	22	5.8	12,349	2.4	1,115	2.7
15	24	6.3	24,567	4.9	2,008	4.9
16	13	3.5	19,007	3.8	1,460	3.6

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILE, AND CERTIFIED ENROLLMENT FILE, 1996-97.

Instructional Aides

The number of instructional aides employed in the public schools is reported in Table 29. Since 1985-86 the number of instructional aides has more than doubled, increasing from a full-time equivalency (FTE) of 2,668.6 to 5,847.1 in 1996-97. This represents an increase of more than 119 percent. The largest percentage increases occurred for districts with enrollments from 600 through 2,499. All but the smallest enrollment category reported increases in FTE instructional aides from 1985-86 to 1996-97.

Table 29

INSTRUCTIONAL AIDES IN IOWA PUBLIC SCHOOLS
1985-86 AND 1996-97

Enrollment Category	Number of Full-time Equivalent Aides 1985-86	1996-97	% Change in FTE Aides 1985-86 to 1996-97
<250	40.1	39.8	-0.7%
250-399	124.2	196.0	57.8
400-599	167.5	308.3	84.1
600-999	249.1	843.5	238.6
1,000-2,499	605.9	1,470.1	142.6
2,500-7,499	625.7	1,311.9	109.7
7,500+	856.1	1,677.5	95.9
State	2,668.6	5,847.1	119.1

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, POLICIES AND PROCEDURES FILES.

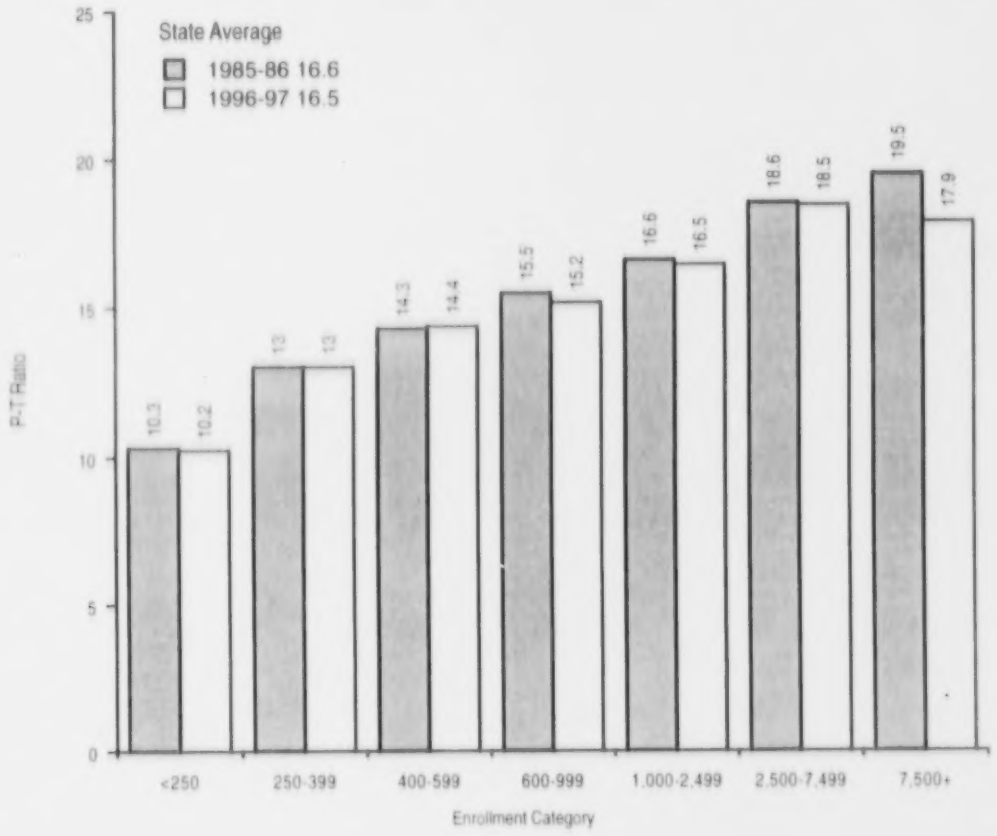
Pupil-Teacher Ratio

The pupil-teacher ratio calculation is made by using enrollments in grades K-12, excluding ungraded special education students, and dividing enrollments by the full-time equivalent teachers, grades K-12.

Statewide, K-12 pupil-teacher ratios in 1996-97 were essentially unchanged from 1985-86 figures. In 1996-97, pupil-teacher ratios varied from 10.2 pupils per teacher in the smallest enrollment category to 18.5 pupils per teacher in districts with enrollments of 2,500-7,499 (Figure 10). In general, pupil-teacher ratios increased with increases in enrollment.

Figure 10

K-12 Pupil-Teacher Ratios for Iowa Public Schools 1985-86 and 1996-97



Source: Iowa Department of Education, Basic Educational Data Survey, Enrollment Files.
Note: Pupil-Teacher ratios do not include special education teachers or ungraded special education students.

Table 30 contains comparison data on K-12 pupil-teacher ratios provided through the National Education Association.

In 1995-96, Iowa ranked 29th nationally in pupil-teacher ratios based on both average daily membership (ADM) and average daily attendance (ADA). In 1994-95, Iowa ranked 27th nationally based on ADM and 30th based on ADA. Among the midwestern states depicted, Iowa had the third highest ratio based on ADA in 1994-95.

Table 30

Pupil Teacher Ratios for Iowa and Midwest States — (1995-96)*

State	Pupil Teacher Ratio in Average Daily Membership (ADM)	Pupil Teacher Ratio in Average Daily Attendance (ADA)
Illinois	16.2	15.1
Iowa	15.4	14.6
Iowa's Rank in Nation	29	29
Kansas	14.3	13.5
Minnesota	17.0	15.9
Missouri	NA	13.8**
Nebraska	14.3**	13.6**
North Dakota	15.2	14.6
South Dakota	15.2	14.5
Wisconsin	15.5	14.5
Nation	NA	15.8

Source: National Education Association, Rankings of the States 1996.
Note: *Includes public elementary and secondary schools only.
**Computed from NEA Research Estimates Databank.

Program

The program chapter of the *Condition of Education Report* presents information on course offerings by subject matter area. The average number of units offered and taught is presented for the base year, 1985-86, and for the most current three school years. Enrollments and estimated percentages of students enrolled in higher level mathematics, science, and foreign language are also presented. In addition, length of school day is compared across enrollment categories. Expenditures for computer hardware, software, and a profile of the status of technology in Iowa schools is also included.

Curriculum Unit Offerings

Table 31 displays a comparison of the average units offered and taught in Iowa public schools in each of the required subject areas. The average number of units in 1996-97 generally remained unchanged from the previous year with only slight changes in English/language arts and foreign language.

Table 31

Average Units Offered and Taught in Iowa Public School Districts

	Revised Minimum Unit Standards		Average Number Units Taught		
Subject Area	1989-90	1985-86	1994-95	1995-96	1996-97
English/Language Arts	6	6.9	8.7	9.0	8.9
Mathematics	6	7.2	8.5	9.0	9.0
Science	5	5.6	6.9	7.0	7.0
Social Studies	5	4.9	6.2	6.4	6.4
Foreign Language	4	3.6	6.2	6.4	6.2
Health/P.Ed.	2	1.3	2.4	2.4	2.4

Source: Iowa Department of Education, Basic Educational Data Survey, Curriculum Files.
Note: Waiver provisions are available under special circumstances.

A comparison of average units offered and taught by enrollment category for the base year 1985-86 and the 1996-97 school year are reported in Tables 32 and 33. In general, the tables reflect that the number of units increase with subsequent increases in enrollments.

Table 32

Average Curriculum Units Offered and Taught in Iowa Public School Districts — 1985-86

	Enrollment Category						
Subject Area	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
English/Language Arts	5.0	5.6	6.3	6.6	8.2	11.4	17.7
Mathematics	6.4	6.4	6.8	7.0	8.0	9.8	12.7
Science	4.6	4.8	5.2	5.7	6.2	8.1	9.6
Social Studies	4.2	4.4	4.7	4.8	5.6	6.5	8.8
Foreign Language	2.1	2.3	2.5	3.2	4.9	9.8	14.9

Source: Iowa Department of Education, Basic Educational Data Survey, curriculum file.
Note: Waiver provisions are available under special circumstances.

Table 33

Average Curriculum Units Offered and Taught in Iowa Public School Districts — 1996-97

Subject Area	Enrollment Category <250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
English/Language Arts	6.4	6.7	7.0	7.4	9.4	13.5	16.5
Mathematics	6.7	7.2	7.3	8.0	9.1	12.7	15.1
Science	5.6	5.7	5.7	6.4	6.8	10.1	10.8
Social Studies	5.2	5.1	5.4	5.6	6.4	8.7	9.9
Foreign Language	3.6	3.8	4.2	4.8	6.8	11.5	17.7

Source: Iowa Department of Education, Basic Educational Data Survey, curriculum file.
Note: Waiver provisions are available under special circumstances.

Foreign Language Enrollments

Public school enrollment in foreign language is presented in Table 34. Figures are provided for 1985-86 and for the most current three school years. In 1996-97, an estimated 51 percent of students in grades 9-12 were enrolled in a foreign language class. In general, for districts under 7,500 enrollment, the estimated percentage of students enrolled in foreign language reflected increases with increased in enrollment. The range in the estimated percentage of students enrolled in foreign language in 1996-97 was 19 percentage points across enrollment categories.

Table 34

Total Iowa Public School Enrollment in All Foreign Language Courses by Enrollment Category — Grades 9-12

Enrollment Category	1985-86 Number of Students	1985-86 Estimated Percent Enrolled	1994-95 Number of Students	1994-95 Estimated Percent Enrolled	1995-96 Number of Students	1995-96 Estimated Percent Enrolled	1996-97 Number of Students	1996-97 Estimated Percent Enrolled
<250	658	20.4%	267	42.4%	268	38.2%	263	37.0%
250-399	1,667	18.2	2,178	40.5	2,093	43.0	2,031	41.7
400-599	2,769	18.9	6,008	43.6	5,947	40.9	5,792	41.0
600-999	5,079	21.8	13,526	57.1	11,641	45.6	12,512	47.1
1,000-2,499	10,536	30.2	19,738	50.2	20,378	50.8	21,733	53.2
2,500-7,499	13,018	42.7	16,014	55.7	16,845	57.6	16,751	56.0
7,500+	13,064	35.9	19,207	52.8	19,049	50.8	19,923	52.6
State	46,791	30.8	76,938	52.0	76,221	50.0	79,005	51.0

Source: Iowa Department of Education, Basic Educational Data Survey, curriculum and enrollment files.
Note: Percents are estimated with an assumption that foreign language courses are normally taken in grades 9-12.

Table 35 displays public school foreign language enrollments for specific language courses. In 1996-97, as in previous years, Spanish was the most frequently taken foreign language with more than 75 percent of the over 79,000 students enrolled in foreign language enrolled in Spanish. French and German courses followed with 15.1 percent and 7.8 percent respectively.

Table 35

1996-97 Foreign Language Enrollment for Iowa Public Schools by Language — Grades 9-12

Language	Number of Districts	Number of Pupils Enrolled	Estimated Percent of Students Enrolled
Spanish I-VI	334	59,525	75.3%
French I-VI	106	11,952	15.1
German I-VI	72	6,172	7.8
Japanese I-V	9	526	0.7
Russian I-V	15	423	0.5
Latin I-V	7	277	0.4
Chinese I-II	1	36	<.1
Italian I-V	1	72	0.1
Norwegian I-II	2	22	<.1

Source: Iowa Department of Education, Basic Educational Data Survey, curriculum file.

Higher Level Mathematics Enrollments

Calculus

The estimated percentage of public school twelfth graders enrolled in calculus increased substantially from 1985-86 to 1996-97 (Table 36 and Figure 11). Table 37 depicts estimated enrollment in calculus for 1996-97 by enrollment category. Nearly 56 percent of the states 379 public school districts, offered and taught calculus to 5,050 students. Fifty-three percent of the students enrolled in calculus were boys. In districts under 600 enrollment, more girls than boys were enrolled. The estimated percent of twelfth graders enrolled ranged from 2.5 percent in the smallest districts to an estimated 20.4 percent in the largest districts.

Table 36

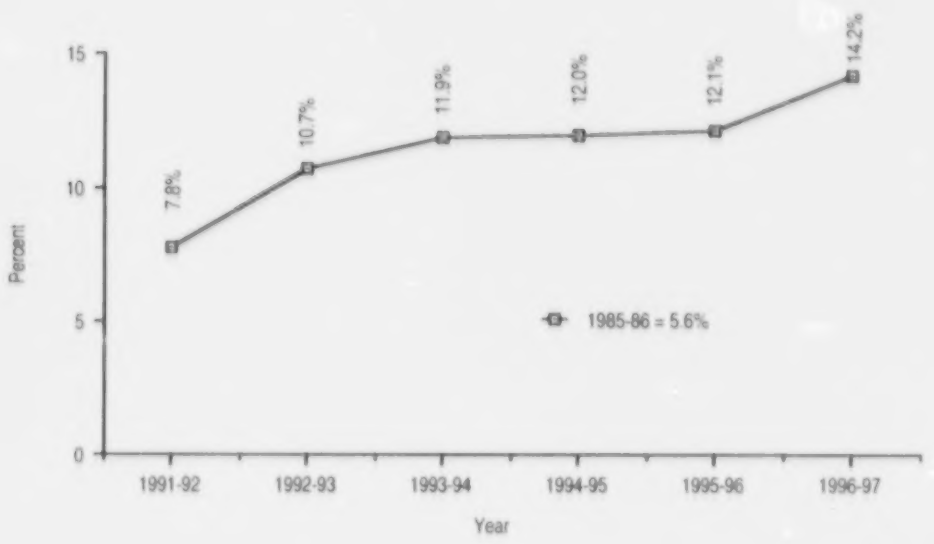
Iowa Public School Enrollment in Calculus

Year	Number of Students Enrolled	Estimated Percent of Students Enrolled
1985-86	2,004	5.6%
1991-92	2,471	7.8
1992-93	3,528	10.7
1993-94	3,864	11.9
1994-95	4,094	12.0
1995-96	4,183	12.1
1996-97	5,050	14.2

Source: Iowa Department of Education, Basic Educational Data Survey, curriculum files.
Note: Estimated percents are based on assumption that calculus is normally taken in grade 12.

Figure 11

Estimated Percent of Iowa Public School Twelfth Graders Enrolled in Calculus



SOURCE: Iowa Department of Education, Basic Educational Data Survey, curriculum and enrollment files.
NOTE: Estimated Percents are based on assumption that calculus is normally taken in grade 12.

Table 37

1996-97 Iowa Public School Enrollment in Calculus by Enrollment Category

		Enrollment Category						
	State	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Number of Districts	214	2	20	39	66	57	21	9
Pupils Enrolled	5,050	5	116	352	559	1,063	1,222	1,733
Estimated Percent	14.2	2.5	9.7	10.6	8.9	11.2	18.2	20.4
Boys	2,675	1	51	174	308	579	666	896
Girls	2,375	4	65	178	251	484	556	837

SOURCE: Iowa Department of Education, Basic Educational Data Survey, curriculum and enrollment files.
NOTE: Estimated Percents are based on assumption that calculus is normally taken in grade 12.

Trigonometry

Iowa public school enrollment in trigonometry has increased from an estimated 9.2 percent of eleventh graders in 1985-86 to 13.5 percent in 1996-97. The trend in the estimated percentage of eleventh graders enrolled in trigonometry peaked in 1991-92 at 15 percent and generally decreased through 1995-96. Compared to the 1995-96 school year, 1996-97 estimates were up nearly one percentage point (Table 38 and Figure 12).

Table 38

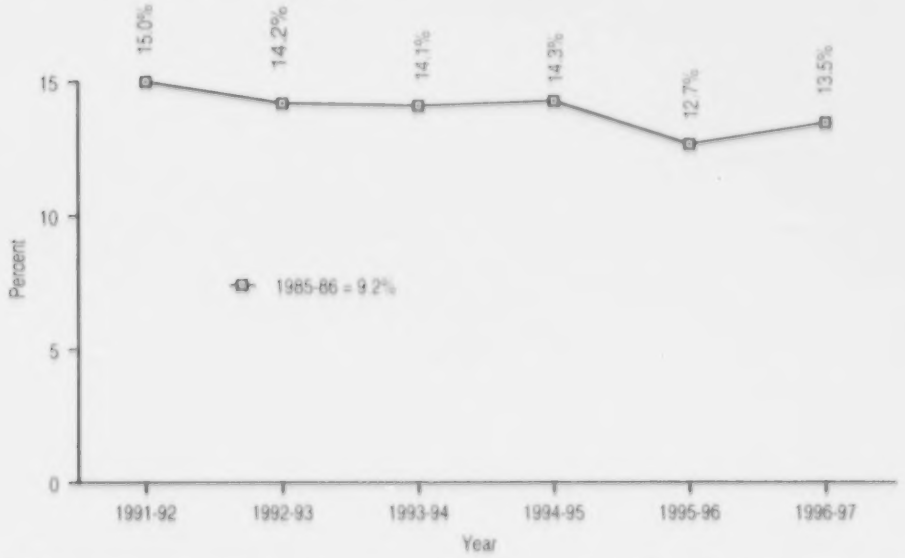
Iowa Public School Enrollment in Trigonometry

Year	Number of Students	Estimated Percent of Students
1985-86	5,107	9.2%
1991-92	4,984	15.0
1992-93	4,663	14.2
1993-94	4,915	14.1
1994-95	5,046	14.3
1995-96	4,677	12.7
1996-97	5,161	13.5

Source: Iowa Department of Education, Basic Educational Data Survey, Curriculum Files.
Note: Estimated percents are based on assumption that trigonometry is normally taken in grade 11.

Figure 12

Estimated Percent of Iowa Public School Eleventh Graders Enrolled in Trigonometry



Source: Iowa Department of Education, Basic Educational Data Survey, Curriculum Files.
Note: Estimated percents are based on assumption that trigonometry is normally taken in grade 11.

Statewide, 5,161 students were enrolled in trigonometry. With respect to gender, enrollments were balanced. The estimated percentage of eleventh graders enrolled in trigonometry generally reflected increases with successive increases in enrollment categories (Table 39).

Table 39

1996-97 Iowa Public School Enrollment in Trigonometry by Enrollment Category

		Enrollment Category						
	State	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Pupils Enrolled	5,161	6	143	286	689	1,331	979	1,727
Estimated Percent	13.5	3.8	11.7	8.3	10.4	12.9	13.6	18.9
Boys	2,591	3	78	147	354	659	490	860
Girls	2,570	3	65	139	335	672	489	867

Source: Iowa Department of Education, Basic Educational Data Survey, curriculum and enrollment files.
Note: Estimated percents are based on assumption that trigonometry is normally taken in grade 11.

Higher Level Science Enrollments

Chemistry

Estimates of the percent of students enrolled in chemistry are based on the assumption that chemistry is normally taken in the eleventh grade. The estimated percentage of students enrolled in chemistry has increased from 48.2 percent in 1985-86 to 64.7 percent in 1996-97. Estimated percentages generally increased through 1994-95, and have decreased by 4.3 percentage points since the peak year of 1994-95 (Table 40 and Figure 13). A total of 24,641 students were enrolled in chemistry during the 1996-97 school year. Overall, the gender distribution was 52.5 percent and 47.5 percent for girls and boys respectively. The estimated percentage of students enrolled in chemistry varied from 56.1 percent in districts under 250 enrollment to 75 percent in districts with enrollments of 2,500-7,499 (Table 41).

Table 40

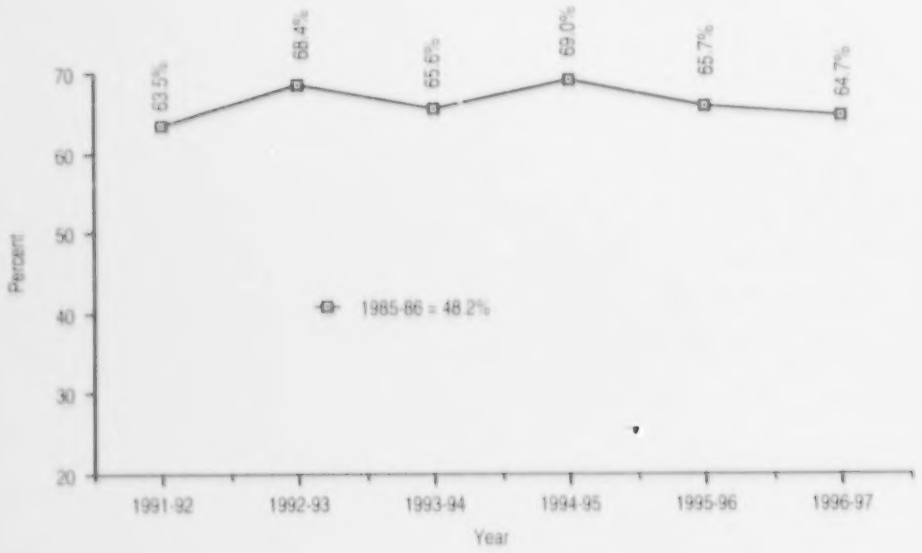
Iowa Public School Enrollment in Chemistry

Year	Number of Students	Estimated Percent of Students
1985-86	17,945	48.2%
1991-92	21,180	63.5
1992-93	22,521	68.4
1993-94	22,860	65.6
1994-95	24,432	69.0
1995-96	24,234	65.7
1996-97	24,641	64.7

Source: Iowa Department of Education, Basic Educational Data Survey, curriculum files.
Note: Estimated percents are based on assumption that chemistry is normally taken in grade 11.

Figure 13

Estimated Percent of Iowa Public School Eleventh Graders Enrolled in Chemistry



Source: Iowa Department of Education, Basic Educational Data Survey, Curriculum Files.
Note: Estimated percents are based on assumption that chemistry is normally taken in grade 11.

Table 41

1996-97 Iowa Public School Enrollment in Chemistry by Enrollment Category

		Enrollment Category						
	State	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Number of Districts	347	9	40	78	104	83	24	9
Pupils Enrolled	24,641	88	667	1,951	4,335	6,361	5,481	5,821
Estimated Percent	64.7	56.1	54.4	56.6	65.5	61.8	75.0	63.7
Boys	11,709	42	302	909	1,972	3,015	2,721	2,748
Girls	12,932	46	365	1,042	2,363	3,346	2,697	3,073

Source: Iowa Department of Education, Basic Educational Data Survey, Curriculum and Enrollment files.
Note: Estimated percents are based on assumption that chemistry is normally taken in grade 11.

Physics

In 1996-97, 11,363 public school students were enrolled in physics. The estimated percentage of students enrolled in physics increased from 24.3 percent of twelfth grade students in 1985-86 to 34 percent in 1993-94. Since 1993-94, to the current year, the estimated percent of students taking physics has decreased slightly each year (Table 42 and Figure 14).

Table 42

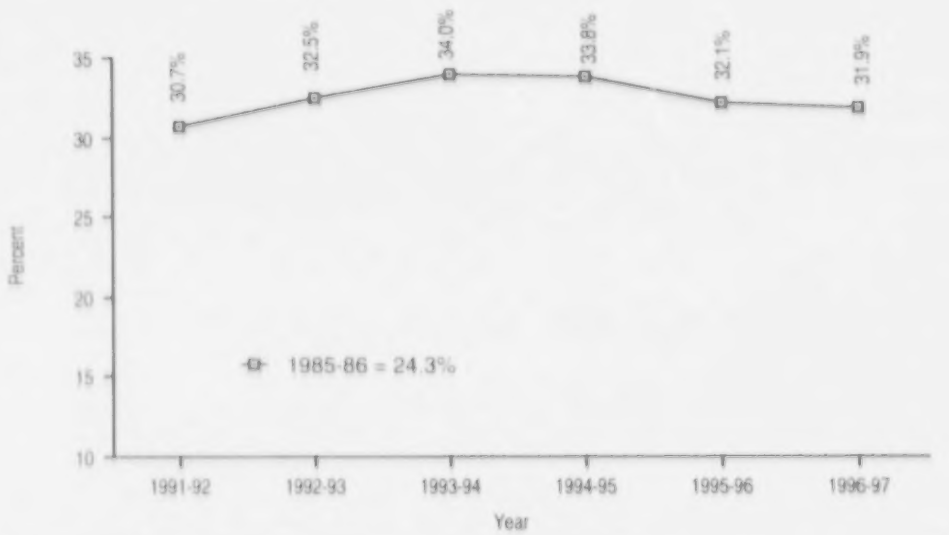
Iowa Public School Enrollment in Physics

Year	Number of Students	Estimated Percent of Students
1985-86	9,051	24.3%
1991-92	9,723	30.7
1992-93	10,714	32.5
1993-94	11,062	34.0
1994-95	11,505	33.8
1995-96	11,107	32.1
1996-97	11,363	31.9

Source: Iowa Department of Education, Basic Educational Data Survey, Curriculum Files.
Note: Estimated percents are based on assumption that physics is normally taken in grade 12.

Figure 14

Estimated Percent of Iowa Public School Twelfth Graders Enrolled in Physics



Source: Iowa Department of Education, Basic Educational Data Survey, Curriculum Files.
Note: Estimated percents are based on assumption that physics is normally taken in grade 12.

Statewide, the gender distribution of students enrolled in physics was 55 percent boys and 45 percent girls. The estimated percentage of students enrolled in physics across the seven enrollment categories ranged from 25.3 percent in districts with enrollments of 250-399 to 38.1 percent in districts with enrollments of 2,500-7,499 (Table 43).

Table 43

1996-97 Iowa Public School Enrollment in Physics by Enrollment Category

		Enrollment Category						
	State	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Number of Districts	343	9	37	77	104	83	24	9
Pupils Enrolled	11,363	67	303	1,056	1,673	2,510	2,558	3,196
Estimated Percent	31.9	33.3	25.3	31.7	26.8	26.5	38.1	37.6
Boys	6,267	32	156	558	937	1,421	1,453	1,710
Girls	5,096	35	147	498	736	1,089	1,105	1,486

Source: Iowa Department of Education, Basic Educational Data Survey, Curriculum and Enrollment Files.
Note: Estimated percents are based on assumption that physics is normally taken in grade 12.

Expenditures for Computer Hardware and Software

Table 44 and Figure 15 reflect that public school expenditures for computer hardware and software totaled nearly $31 million in 1995-96. The average annual percentage increase in total expenditures from 1992-93 to 1995-96 was 15.3 percent. Statewide total per pupil expenditures increased from just under $41 in 1992-93 to just over $61 per pupil in 1995-96. Over the period from 1992-93 to 1995-96, total expenditures for software have fluctuated in terms of increases and decreases, while expenditures for hardware have increased steadily. Total hardware expenditures were up 75.2 percent for the period.

Table 44

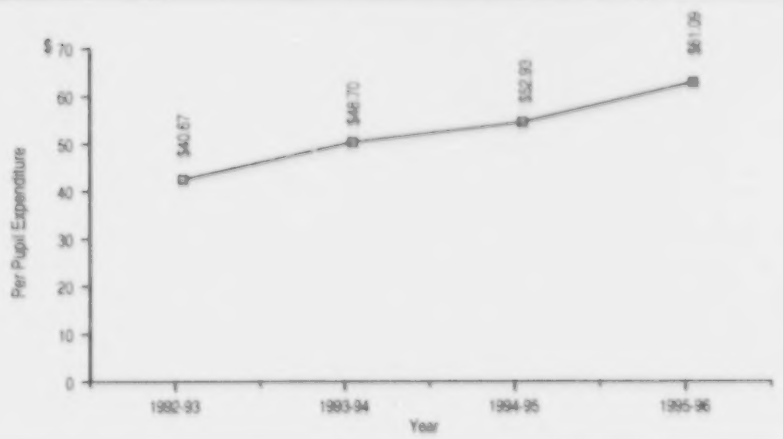
Total Expenditures and Per Pupil Expenditures for Computer Software and Hardware* In Iowa Public Schools Four-Year Comparison

			Software		Hardware		Software & Hardware	
Year	No. of Districts	Total Enrollment	Total Spent	Per Pupil Spent	Total Spent	Per Pupil Spent	Total Spent	Per Pupil Spent
1992-93	418	495,342	$5,581,237	$11.27	$14,562,080	$29.40	$20,143,317	$40.67
1993-94	397	497,089	$3,957,878	$7.96	$20,244,041	$40.73	$24,201,919	$48.70
1994-95	390	500,592	$5,448,978	$10.88	$21,049,364	$42.05	$26,498,342	$52.93
1995-96	384	504,505	$5,303,893	$10.51	$25,513,948	$50.57	$30,817,841	$61.09

Source: Iowa Department of Education, Certified Annual Financial Reports. (Per Pupil expenditures based on Certified Enrollment)
Note: *Includes Administrative, Instructional, and all other Software and Hardware Purchased.

Figure 15

Per Pupil Expenditures for Computer Software and Hardware in Iowa Public Schools



Source: Iowa Department of Education, Certified Annual Financial Report and Certified Enrollment Files.

Computer hardware and software expenditures by enrollment category are reflected in Table 45. Per pupil expenditures for software varied from $6 per pupil in the smallest enrollment category to $20 per pupil in districts with enrollments of 250-399. For the state, 1995-96 per pupil expenditures for computer software were $11, equaling the expenditure for the previous school year. Hardware expenditures were up an average of $9 per pupil from the previous year.

Table 45

Iowa Public School Total and Per Pupil Expenditures for Computer Software and Hardware 1995-96*

Enrollment Category	Number of Districts	Total Enrollment	Software				Hardware			
			Total Spent	Minimum	Maximum	Per Pupil Average	Total Spent	Minimum	Maximum	Per Pupil Average
<250	26	5,276	$30,771	$0	$5,793	$6	$157,165	$0	$26,820	$30
250-399	50	16,708	$333,267	$0	$47,899	$20	$1,540,471	$0	$147,993	$92
400-599	81	40,248	$421,405	$0	$23,151	$10	$2,422,297	$0	$133,020	$60
600-999	108	82,130	$964,047	$0	$66,433	$12	$4,496,173	$0	$192,489	$55
1,000-2,499	85	128,363	$1,176,969	$0	$73,781	$9	$6,070,542	$0	$434,323	$47
2,500-7,499	25	99,023	$1,232,092	$0	$197,041	$12	$5,745,106	$0	$630,317	$58
7,500+	9	132,757	$1,145,342	$44,499	$301,416	$9	$5,082,194	$4,453	$1,040,182	$38
State	384	504,505	$5,303,893	$0	$301,416	$11	$25,513,948	$0	$1,040,182	$51

Source: Iowa Department of Education, Certified Annual Financial Report, 1995-96. (Per Pupil Expenditures based on Certified Enrollment)

Note: *Includes Administrative, Instructional, and all other Software and Hardware Purchased.

Length of School Day

The length of the high school day is defined as the total time school is in session, minus the lunch period. The length of the school day for Iowa public high schools for the 1990-91 and 1996-97 school years is shown in Tables 46 and 47. For the state as a whole, the length of the school day has remained essentially unchanged when comparing 1990-91 and 1996-97 school years. Little variation was evident across enrollment categories for either 1990-91 or 1996-97.

Table 46

Length of School Day Reported by Iowa Public High Schools by Enrollment Category 1990-91 — (Hours:Minutes)

Enrollment Category	Number[1] of Districts	Mean	Median	Min	Max	Range
<250	16	6:29	6:29	6:11	6:41	:30
250-399	62	6:30	6:30	6:05	6:49	:44
400-599	101	6:32	6:33	6:00	6:55	:55
600-999	88	6:29	6:30	5:55	6:55	1:00
1,000-2,499	74	6:26	6:26	5:51	6:47	:56
2,500-7,499	23	6:26	6:27	5:55	6:55	1:00
7,500+	7	6:19	6:20	6:10	6:30	:20
State	371	6:28	6:30	5:51	6:55	1:04

Source: Iowa Department of Education, Basic Educational Data Survey, Policies and Procedures File, 1990-91.
Note: [1]Number of districts operating high school programs.

Table 47

Length of School Day Reported by Iowa Public High Schools by Enrollment Category 1996-97 — (Hours:Minutes)

Enrollment Category	Number[1] of Districts	Mean	Median	Min	Max	Range
<250	9	6:36	6:40	6:16	6:45	:29
250-399	37	6:33	6:35	6:15	6:50	:35
400-599	74	6:31	6:30	6:13	6:55	:42
600-999	116	6:32	6:35	6:05	6:57	:52
1,000-2,499	83	6:28	6:28	6:52	6:55	1:03
2,500-7,499	25	6:26	6:25	6:00	7:05	1:05
7,500+	9	6:21	6:20	6:05	6:51	:46
State	353	6:30	6:30	5:52	7:05	1:13

Source: Iowa Department of Education, Basic Educational Data Survey, Policies and Procedures File, 1996-97.
Note: [1]Number of districts operating high school programs.

Technology

Technology data are based on the annual technology survey of public school districts conducted by the Iowa Department of Education. Results are based on surveys received from public school districts. Areas represented in the survey included: 1. computer/hardware; 2. Internet uses and software; 3. instructional integrated technology; 4. automated student records; and 5. technology staff development.

It should be noted that comparisons made with respect to the status of specific technology statistics for the school years 1995-96 and 1996-97 are based on a 100 percent return rate for 1996-97 and upon 331 completed surveys, or a return rate of 86.4 percent for the 1995-96 school year.

Availability of Computers and Other Technology

Tables 48 and 49 depict the total number of computers reported by public school districts, the certified enrollment, and the number of pupils per computer. In 1995-96 the total number of pupils per computer statewide was 7.2 compared to 5.9 in 1996-97. For all seven enrollment categories, substantial decreases in the number of pupils per computer were noted. In 1996-97 as in 1995-96 the ratio of pupils per computer was lowest in the smallest enrollment categories and increased with each successively larger enrollment category.

Table 48

Computer Distribution in Iowa Public School Districts 1995-96

	Enrollment Category							
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	State
Number of Districts Reporting	22	43	74	91	72	22	7	331
Number of Computers	829	2,778	6,043	11,258	13,989	10,010	9,371	54,278
Certified Enrollment[1]	4,509	13,102	36,043	68,185	104,286	82,049	82,983	391,157
Pupils per Computer[2]	5.4	4.7	6.0	6.1	7.6	8.2	8.9	7.2

Source: Iowa Department of Education, Using computers and the World Wide Web, 1996 (Survey of public school districts jointly sponsored by Iowa State University).

Notes: [1]Sum of certified enrollment for districts reporting.
[2]Certified enrollment divided by the number of computers.

Table 49

Computer Distribution in Iowa Public School Districts 1996-97

	Enrollment Category							
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	State
Number of Districts Reporting	24	46	76	116	83	25	9	379
Number of Computers	1,155	3,813	7,904	18,206	21,910	16,197	17,054	86,239
Certified Enrollment[1]	4,818	15,324	37,699	88,577	126,738	99,427	133,004	505,587
Pupils per Computer[2]	4.2	4.0	4.8	4.9	5.8	6.1	7.8	5.9

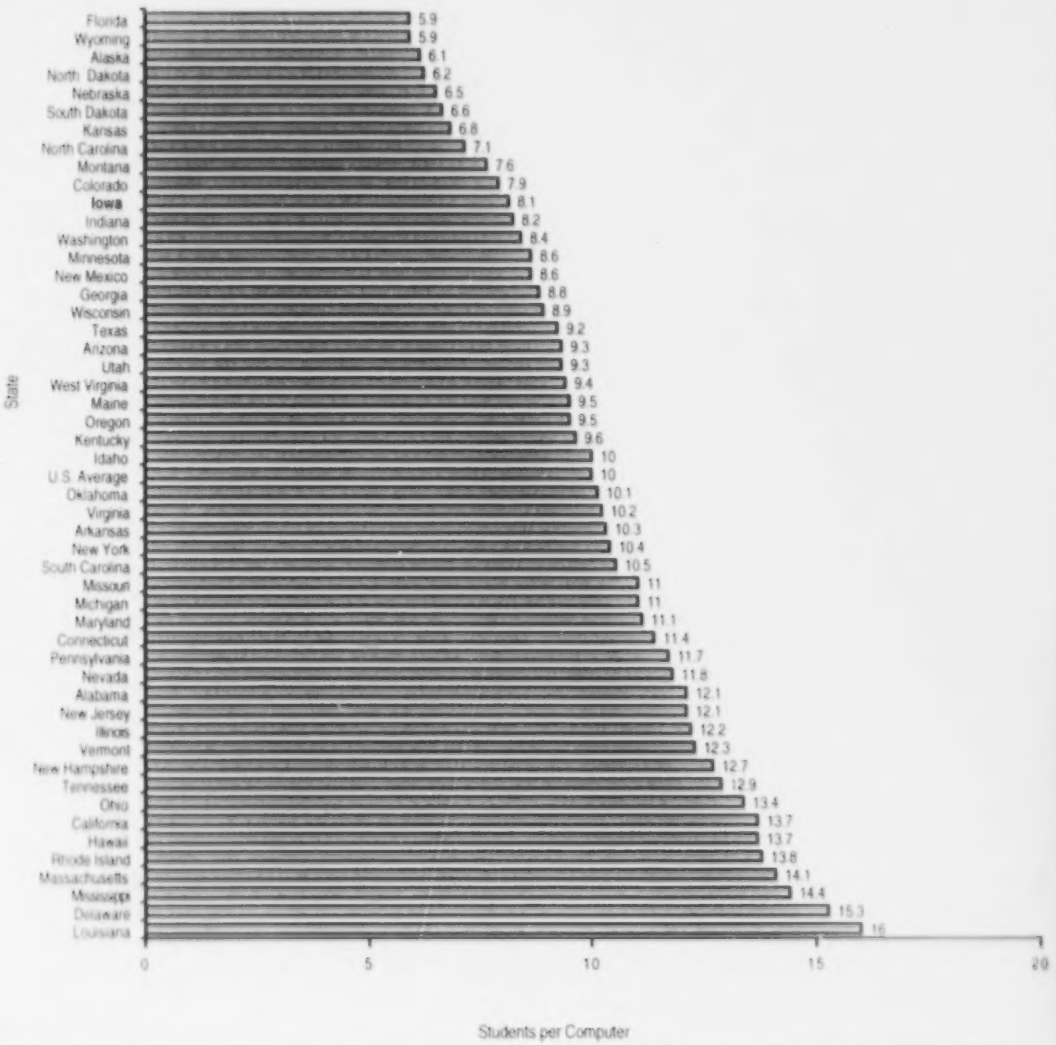
Source: Iowa Department of Education, Bureau of Planning, Research, and Evaluation, Technology Survey, 1996-97 Technology File.

Notes: [1]Sum of certified enrollment for districts reporting.
[2]Certified enrollment divided by the number of computers.

Figure 16 presents data for the nation with respect to the number of pupils per computer. According to Quality Education Data (QED) results from the 1996-97 school year, there were ten students per computer for the nation as a whole. QED results (estimated for Iowa) ranked Iowa eleventh of 50 states with 8.1 pupils per computer. This figure varies from the 5.9 pupils per computer reported in the Iowa Department of Education Technology Survey with all school districts reporting. Using the Iowa Department of Education results, Iowa would rank in a three-way tie with Florida and Wyoming for the lowest ratio of pupils per computer.

Figure 16

Number of Students per Computer, by State
1996-97 School Year



SOURCE: EDUCATIONAL TESTING SERVICE, POLICY INFORMATION CENTER, MAY, 1997. (CITED FROM QUALITY EDUCATION DATA, 1997), COMPUTERS AND CLASSROOMS: THE STATUS OF TECHNOLOGY IN U.S. SCHOOLS.

Table 50 provides a comparison of the percent of certified enrollment and the percent of the total number of computers reported in public schools. In 1996-97, districts under 2,500 enrollment reported a higher percentage of computers than the percentage of enrollment represented by enrollment categories.

Districts with enrollments of 7,500 and above represented 26.3 percent of the certified enrollment and less than 20 percent of all computers in use by Iowa public schools.

Table 50

Distribution of Computers versus Certified Enrollment Distribution in Iowa Public School Districts — 1996-97

	Enrollment Category							
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	State
Number of Districts Reporting	24	46	76	116	83	25	9	379
Percent of Certified Enrollment	1.0	3.0	7.4	17.5	25.1	19.7	26.3	100.0
Percent of Computers	1.3	4.4	9.2	21.1	25.4	18.8	19.8	100.0

Source: Iowa Department of Education, Bureau of Planning, Research, and Evaluation, Technology Survey, 1996-97 Technology File.

The location of in-school computers is reported in Table 51. Just over an average of 48 percent of all computers in public schools were located in computer labs, while an average of nearly 43 percent were housed in classrooms, and nine percent were placed in media centers.

Table 51

Location of In-School Computers in Iowa Public School Schools —1996-97

Location of Computers	Number of Districts Reporting[1]	Average Percent of Computers[2]
Computer Lab	329	48.2%
Classrooms	329	42.8
Media Center	329	9.0

Source: Iowa Department of Education, Bureau of Planning, Research, and Evaluation, Technology Survey, 1996-97 Technology File.

Notes: [1]Includes only those districts where percentages totaled 100 percent.
[2]Represents the average percent of computers by location.

Table 52 presents information on the number and type of computers in use in Iowa public school districts. At both the elementary (K-6) and secondary (7-12) levels, Macintosh/Power Macintosh was the predominant type of computer in use, representing 47.7 percent and 54.5 percent of all computers respectively.

At the elementary level, the Apple II Series computer was the second most prevalent, representing 38 percent of all computers in use. At the secondary level the second most commonly used computers were PC's representing 30.9 percent of the nearly 48,000 computers used by 7-12 students. Statewide, Macintosh and Power Macintosh were used by all students by more than two to one over PC's and the Apple II Series computers.

Table 52

Number and Percent of Computers in Iowa Public School Districts by Type of Computer and Grade Level — 1996-97

Grade Level	Type of Computer: PC (DOS/Windows) N	%	Macintosh/ Power Mac N	%	Apple II Series N	%	Total N	%
Elementary (K-6)	5,473	14.3%	18,253	47.7%	14,554	38.0%	38,280	44.4%
Secondary (7-12)	14,801	30.9	26,134	54.5	7,024	14.6	47,959	55.6
Total	20,274	23.5	44,387	51.5	21,578	25.0	86,239	100.0
Number of Districts	322		370		341		379	

Source: Iowa Department of Education, Bureau of Planning, Research, and Evaluation, Technology Survey, 1996-97 Technology File.

Access to the Internet

Table 53 reflects the number and percent of Iowa public school districts whose students have regular in-school access to the Internet. Data are provided for 1995-96 and 1996-97. It should be noted here that in 1995-96 the questions posed regarding Internet access did not contain the qualifiers "regular in-school access by students," but instead referred only to having access.

In 1995-96, 72.2 percent of districts surveyed reported they had Internet access compared to 91.6 percent of all school districts indicating that students had regular in-school access to the Internet in 1996-97. In 1995-96, districts with enrollments under 600 had substantially less access to the Internet than other districts. Only 50 percent of the smallest districts reported having access to the Internet. The percentage of districts with Internet access increased substantially for all enrollment categories from 1995-96 to 1996-97.

Table 53

Number and Percent of Iowa Public School Districts with Access to the Internet

Enrollment Category	Number of Districts Responding 95-96	96-97	Number of Districts with Internet Access 95-96	96-97	Percent of Districts with Internet Access 95-96	96-97
<250	22	24	11	20	50.0%	83.3%
250-399	43	46	29	42	67.4	91.3
400-599	74	76	47	64	63.5	84.2
600-999	91	116	71	107	78.0	92.2
1,000 - 2,499	72	83	54	81	75.0	97.6
2,500-7,499	22	25	21	24	95.5	96.0
7,500+	7	9	6	9	85.7	100.0
State	331	379	239	347	72.2	91.6

Source: Iowa Department of Education, Using Computers and the Internet, 1996 (Survey of public school districts jointly sponsored by Iowa State University) and Iowa Department of Education, Bureau of Planning, Research, and Evaluation, Technology Survey, 1996-97 Technology File.

CD ROMs, Modems, and Laserdiscs

The number of Iowa school districts reporting the use of CD ROMs, modems, and laserdisc players in 1995-96 and in 1996-97 is shown in Tables 54 and 55. Statewide, the highest use was reported for CD ROMs at 99.7 percent in 1996-97, compared to 94.3 percent of the districts in 1995-96. Modem usage was up from 277 districts in 1995-96 to 317 districts in 1996-97. Laserdisc usage was up from 248 districts in 1995-96 to 288 districts in 1996-97, reflecting a small percentage increase in use over the previous school year.

Table 54

Number of Iowa Public School Districts Using CD-ROMs, Modems, and Laserdisc Players — 1995-96

	Enrollment Category							
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	State
Number of Districts Reporting	22	43	74	91	72	22	7	331
TECHNOLOGY								
CD-ROM								
Number	19	40	73	85	69	19	7	312
Percent	86.4	93.0	98.6	93.4	95.8	86.4	100.0	94.3
MODEMS								
Number	16	36	53	83	62	20	7	277
Percent	84.2	90.0	72.6	91.2	86.1	90.9	100.0	83.7
LASERDISC PLAYER								
Number	16	27	47	67	65	20	6	248
Percent	72.7	62.8	63.5	73.6	90.3	90.9	85.7	74.9

SOURCE: Iowa Department of Education, Using Computers and the World Wide Web, 1996 (Survey of public school districts jointly sponsored by Iowa State University).

Table 55

Number of Iowa Public School Districts Using CD-ROMs, Modems, and Laserdisc Players — 1996-97

	Enrollment Category							
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	State
Number of Districts Reporting	24	46	76	116	83	25	9	379
TECHNOLOGY								
CD-ROM								
Number	24	46	76	116	83	24	9	378
Percent	100.0	100.0	100.0	100.0	100.0	96.0	100.0	99.7
MODEMS								
Number	23	35	60	95	74	21	9	317
Percent	95.8	76.1	78.9	81.9	89.2	84.0	100.0	83.4
LASERDISC PLAYER								
Number	14	30	51	92	70	22	9	288
Percent	58.3	65.2	67.1	79.3	84.3	88.0	100.0	76.0

SOURCE: Iowa Department of Education, Bureau of Planning, Research, and Evaluation, Technology Survey, 1996-97 Technology File.

Local Area Networks (LANS) and Wide Area Networks (WANS)

The number of districts reporting the use of local area networks (LANS) increased from 226 or 68.3 percent in 1995-96 to 312 or 82.3 percent in 1996-97. In 1995-96, 18.7 percent of districts reporting indicated having wide area networks (WANS), compared to a reported 40.1 percent in 1996-97. In 1996-97 the percentage of districts reporting LANS ranged from 50 percent in the smallest districts to 100 percent in the largest districts (Tables 56 and 57).

WANS were less prevalent than LANS and the percentage of districts reporting WANS in 1996-97 ranged from 8.3 percent in districts with enrollments under 250 to 100 percent in the largest enrollment category (Table 57).

Table 56

Local Area and Wide Area Network Distribution in Iowa Public School Districts — 1995-96

	Enrollment Category							
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	State
Number of Districts Reporting	22	43	74	91	72	22	7	331
LOCAL AREA NETWORK								
Number	8	24	46	60	61	21	6	226
Percent	36.4	55.8	62.2	65.9	84.7	95.5	85.7	68.3
WIDE AREA NETWORK								
Number	0	7	6	17	18	9	5	62
Percent	0	16.3	8.1	18.7	25.0	40.9	71.4	18.7

Source: Iowa Department of Education, Using Computers and the World Wide Web, 1996 (Survey of public school districts jointly sponsored by Iowa State University).

Table 57

Local Area and Wide Area Network Distribution in Iowa Public School Districts — 1996-97

	Enrollment Category							
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	State
Number of Districts Reporting	24	46	76	116	83	25	9	379
LOCAL AREA NETWORK								
Number	12	34	57	96	79	25	9	312
Percent	50.0	73.9	75.0	82.6	95.2	100.0	100.0	82.3
WIDE AREA NETWORK								
Number	2	12	21	47	46	15	9	152
Percent	8.3	26.1	27.6	40.5	55.4	60.0	100.0	40.1

Source: Iowa Department of Education, Bureau of Planning, Research, and Evaluation, Technology Survey, 1996-97 Technology File.

Cable Television

A total of 316 of Iowa's public school districts reported having cable television in 1996-97. This represented 83.4 percent of all districts, a slightly higher percentage of districts than reported in 1995-96 (Table 58). Districts with enrollments of 1,000 or more, reported a substantially higher percentage of cable television availability than other enrollment categories in both years.

Table 58

Number and Percent of Iowa Public School Districts using Cable Television in 1995-96 and 1996-97

Enrollment Category	Number of Districts Reporting		Number of Districts with Cable TV		Percent of Districts with Cable TV	
	95-96	96-97	95-96	96-97	95-96	96-97
<250	22	24	18	18	81.8%	75.0%
250-399	43	46	37	37	86.0	80.4
400-599	74	76	51	56	68.9	73.7
600-999	91	116	75	91	82.4	78.4
1,000 - 2,499	72	83	65	80	90.3	96.4
2,500-7,499	22	25	20	25	90.9	100.0
7,500+	7	9	7	9	100.0	100.0
State	331	379	273	316	82.5	83.4

Source: Iowa Department of Education, Using Computers and the World Wide Web, 1996 (Survey of public school districts jointly sponsored by Iowa State University) and Iowa Department of Education, Bureau of Planning, Research, and Evaluation. Technology Survey, 1996-97 Technology File.

Satellite Dishes

Statewide, 379 public school districts, 35.1 percent, reported having satellite dishes in 1996-97. A substantially higher percentage of districts with enrollments of 1,000 and above reported using satellite dishes than districts with enrollments below 1,000. Figures reported in 1996-97 were quite similar to 1995-96 figures (Table 59).

Table 59

Number and Percent of Iowa Public School Districts using Satellite Dishes — 1995-96 and 1996-97

Enrollment Category	1995-96		1996-97	
	Number of Districts Reporting	Percent of Districts with Satellites	Number of Districts Reporting	Percent of Districts with Satellites
<250	22	13.6%	24	12.5%
250-399	43	20.9	46	19.6
400-599	74	17.6	76	23.7
600-999	91	41.8	116	37.9
1,000 - 2,499	72	48.6	83	47.0
2,500-7,499	22	59.1	25	56.0
7,500+	7	57.1	9	66.7
State	331	34.7	379	35.1

Source: Iowa Department of Education, Using Computers and the World Wide Web, 1996 (Survey of public school districts jointly sponsored by Iowa State University) and Iowa Department of Education, Bureau of Planning, Research, and Evaluation. Technology Survey, 1996-97 Technology File.

Instructional Integration of Technology

The percentages of Iowa public school districts using the Internet as a part of instructional programs is displayed in Table 60. At the elementary (K-6) level, more than 60 percent of districts reported using the Internet as a part of instruction less than ten percent of the time, while only one third of the districts reporting used the Internet less than ten percent of the time at the secondary (7-12) level. Just over 12 percent of the districts indicated using the Internet for elementary instruction 50 percent or more of the time compared to nearly 37 percent at the secondary level.

Table 60

Iowa Public School District Percentage of Internet Use as A Part of Instructional Programs — 1996-97

Level	Percent of Technology Use									
	<10%		10-24%		25-49%		50-79%		80+%	
	N	%	N	%	N	%	N	%	N	%
Elementary (K-6)	229	60.6%	65	17.2%	38	10.0%	33	8.7%	13	3.4%
Secondary (7-12)	125	33.1	47	12.4	67	17.7	74	19.6	65	17.2

Source: Iowa Department of Education, Bureau of Planning, Research, and Evaluation. Technology Survey, 1996-97 Technology File.

The percentage of time students used technology by instructional area is presented in Table 61. In the area of physical development (physiology) more than 85 percent of all districts reported that 50 percent, or more, of the instruction involved student use of technology. Foreign language instruction ranked second with 74.7 percent of all districts indicating that technology use by students was part of the instruction at least 50 percent of the time.

Table 61

Percent of Time Iowa Public School Students Use Technology[1] in Various Instructional Areas — 1996-97

Instructional Area	Percent of Technology Use					
	<10%	10-24%	25-49%	50-79%	80+%	Total
Language Arts	26%	68%	94%	111%	53%	352
Biological & Physical Science	5	39	78	127	102	351
Mathematics	9	31	61	117	131	349
Social Science	6	30	75	123	115	349
Physical Development (Physiology)	2	10	11	59	264	346
Fine Arts	5	27	53	92	169	346
Foreign Language	5	13	37	99	184	338
School-to-Work	20	36	52	70	141	319

Source: Iowa Department of Education, Bureau of Planning, Research, and Evaluation. Technology Survey, 1996-97 Technology File.

Note: [1]Excludes districts that checked more than one percentage interval per instructional area.

Automated Student Records

In 1996-97, nearly three of every four of Iowa's public school districts reported having automated student record systems just over 46 percent of the districts reported having K-12 automated student records, compared to 26.8 percent in 1995-96. Generally, the incidence of automated student records increased with successive increases in enrollment categories (Table 62).

Table 63 reflects the uses being made of automated student record systems by school districts. Based on the percentage of district reported uses of automated student records in 1996-97, the most prevalent uses were for attendance, 75.2 percent; scheduling, 72.8 percent; and to record courses taken by students, 71.8 percent. In the previous school year these three categories were also the predominate uses made of automated student record systems with recording courses taken listed as the highest use followed by attendance and scheduling respectively.

Table 62

Number and Percent of Iowa Public School Districts Using Automated Student Record Systems (ASRS) 1995-96 and 1996-97

	Number of Districts with ASRS		Percent of Districts with ASRS		Number of Districts with K-12 ASRS		Percent of Districts with K-12 ASRS	
Enrollment Category	95-96	96-97	95-96	96-97	95-96	96-97	95-96	96-97
<250	7	6	26.9%	25.0%	2	2	7.7%	8.3%
250-399	29	30	58.0	65.2	11	21	22.0	45.7
400-599	57	57	70.4	75.0	20	32	24.7	42.1
600-999	73	86	67.6	74.1	35	53	32.4	45.7
1,000-2,499	62	70	72.9	84.3	22	40	25.9	48.2
2,500-7,499	21	22	84.0	88.0	7	20	28.0	80.0
7,500+	7	8	77.8	88.9	6	7	66.7	77.8
State	256	279	66.7	73.6	103	175	26.8	46.2

Source: Iowa Department of Education, Using Computers and the World Wide Web, 1996 (Survey of public school districts jointly sponsored by Iowa State University) and Iowa Department of Education, Bureau of Planning, Research, and Evaluation. Technology Survey, 1996-97 Technology File.

During 1996-97, a total of 34 or nine percent of public school districts used, tested, or were involved in preparation for using Electronic Data Interchange (EDI) to transmit student transcripts to post secondary institutions and to transmit student records to replace paper-based Department of Education Basic Educational Data Survey documents. Electronic Data Interchange (EDI) is the transmission of data, from one entity to another, by electronic means utilizing standardized formats. In the prior year, only six districts or 1.6 percent of public school districts were involved in the use or preparation for use of EDI (Table 63).

Table 63

Uses of Automated Student Record Systems in Iowa Public School Districts 1995-96 and 1996-97

	Number of Districts		Percent of Districts	
Uses	95-96	96-97	95-96	96-97
Attendance	235	285	61.2%	75.2%
Courses Taken	237	272	61.7	71.8
Cumulative Folder	111	131	28.9	34.6
Demographics	139	196	48.9	51.7
Dropouts	109	161	28.4	42.5
EDI[1]	6	34	1.6	9.0
Scheduling	234	276	60.9	72.8
Other	39	58	10.2	15.3

Source: Iowa Department of Education, Using Computers and the World Wide Web, 1996 (Survey of public school districts jointly sponsored by Iowa State University) and Iowa Department of Education, Bureau of Planning, Research, and Evaluation. Technology Survey, 1996-97 Technology File.

Note: [1]Electronic Data Interchange (use or intended use to transmit student transcripts to post secondary institutions and to transmit data to replace paper-based Basic Educational Data Survey Documents for Department of Education Reports).

Technology Staff Development

Table 64 reflects technology staff development areas provided by local school districts. Statewide, the most predominant technology staff development areas dealt with general computer use and use of the Internet. In general, these two areas of staff development ranked highest across all enrollment categories. For the largest enrollment categories, administrative uses of technology and classroom technology application ranked as the two highest areas, while administrative use and general Internet use ranked highest for the smallest districts.

Table 64

Percent of Iowa Public School Districts Providing Technology Related Staff Development 1996-97

	Enrollment Category							
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	State
Area of Staff Development								
Administrative Uses	70.8%	63.0%	69.7%	70.7%	81.9%	92.0%	100.0%	73.9%
Classroom Tech. Application	66.7	84.8	84.2	76.7	88.0	80.0	100.0	81.5
General Computer Use	66.7	76.1	82.9	85.3	90.4	96.0	88.9	84.2
General Internet	70.8	89.1	78.9	83.6	91.6	96.0	77.8	84.7
ICN Classroom	16.7	34.8	28.9	35.3	34.9	80.0	66.7	36.1
Multimedia	33.3	52.2	48.7	46.6	60.2	84.0	77.8	52.8
Networks	37.5	37.0	42.1	37.9	54.2	60.0	55.6	43.3
Software/Hardware Instruction	45.8	63.0	69.7	55.2	68.7	72.0	66.7	62.5
Techniques for Using WWW	45.8	58.7	60.5	70.7	77.1	88.0	66.7	67.8
Technology Curriculum Integration	37.5	47.8	38.2	47.4	61.4	72.0	55.6	49.6
Video Conferencing	0	8.7	10.5	7.8	8.4	12.0	11.1	8.4
Other	8.3	2.2	5.3	1.7	6.0	12.0	11.1	4.7
Number of Districts Reporting	24	46	76	116	83	25	9	379

Source: Iowa Department of Education, Bureau of Planning, Research, and Evaluation. Technology Survey, 1996-97 Technology File.

Student Performance

The student performance section of the Condition of Education Report presents information on the educational performance of Iowa students. The following performance indicators are included: 1) Iowa Tests of Basic Skills (ITBS); 2) Iowa Tests of Educational Development (ITED); 3) American College Testing Assessments (ACT); 4) Scholastic Aptitude Tests (SAT); 5) Advanced Placement (AP); 6) National Assessment of Educational Progress (NAEP). Also included is information on post secondary enrollment options, pursuit of post secondary education/training, school dropouts, and high school completion rates.

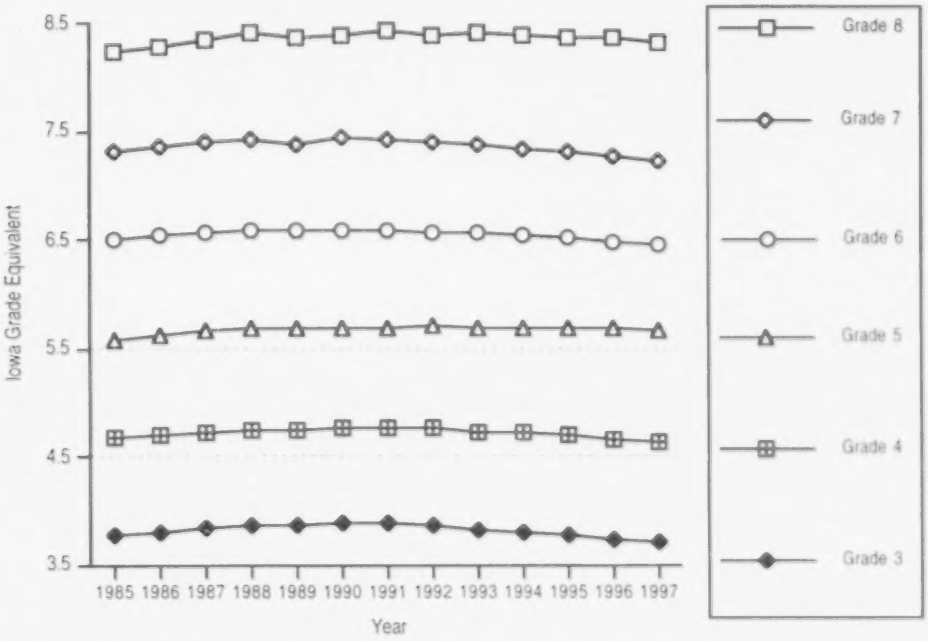
Iowa Testing Programs

Iowa Testing Programs, University of Iowa, operates a standardized testing program for students in grades 3-12. On a voluntary basis, public school districts and nonpublic schools can participate for a nominal fee. The Iowa Tests of Basic Skills (ITBS) are offered for grades 3-8 and the Iowa Tests of Educational Development (ITED) are available for 9-12.

These student achievement tests are designed to provide information to Iowa educators to be used in improving instruction and student learning. The results help diag-

Figure 17

IOWA ITBS COMPOSITE SCORES GRADES 3-8, 1985-1997
IN TERMS OF 1965 "BASE YEAR" IOWA GRADE EQUIVALENTS



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.
NOTE: BASELINE IS MIDYEAR OF 1965.

nose student's strengths and weaknesses, monitor student progress, and describe a student's overall achievement.

Iowa Tests of Basic Skills (ITBS)

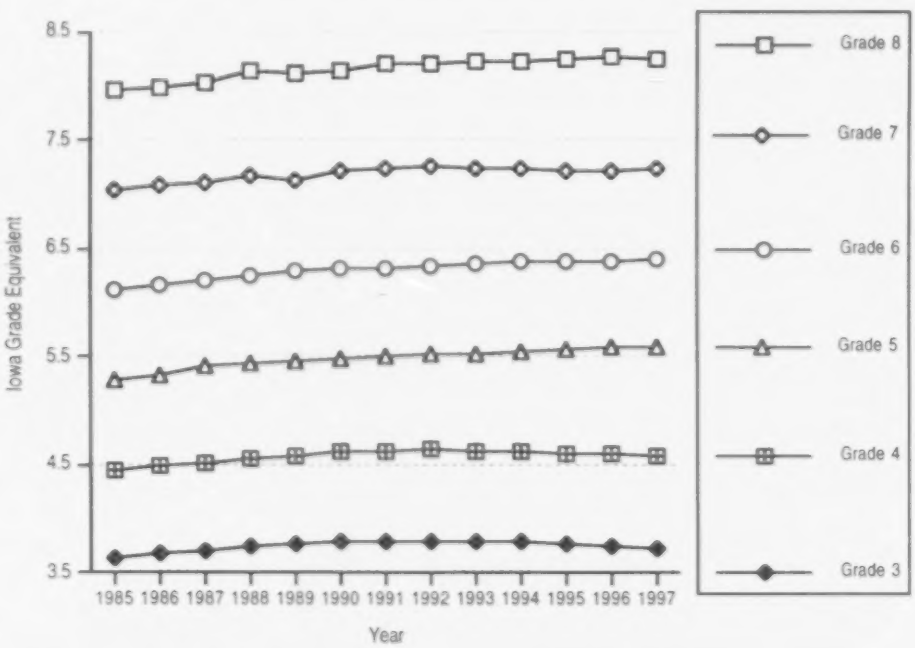
ITBS is a battery of 13 tests. The tests include vocabulary, reading comprehension, spelling, capitalization, punctuation, usage and expression, math concepts and estimation, math problem solving and data interpretation, math computation, social studies, science, maps and diagrams, and reference materials. During the 1996-97 school year 378 public school districts and 210 nonpublic schools administered the ITBS to 260,000 students.

Figure 17 reflects composite ITBS scores in terms of grade equivalents for grades 3-8. Data are presented for the school years 1984-85 through 1996-97. In general, for all grade levels shown, composite scores have shown a gradual trend downward over the last five years.

ITBS mathematics grade equivalent scores for Iowa students in grades 3-8 are presented in Figure 18. Iowa grade equivalent scores for grades three through eight have generally remained stable over the last five years.

Figure 18

IOWA ITBS MATHEMATICS SCORES GRADES 3-8, 1985-1997
IN TERMS OF 1965 "BASE YEAR" IOWA GRADE EQUIVALENTS

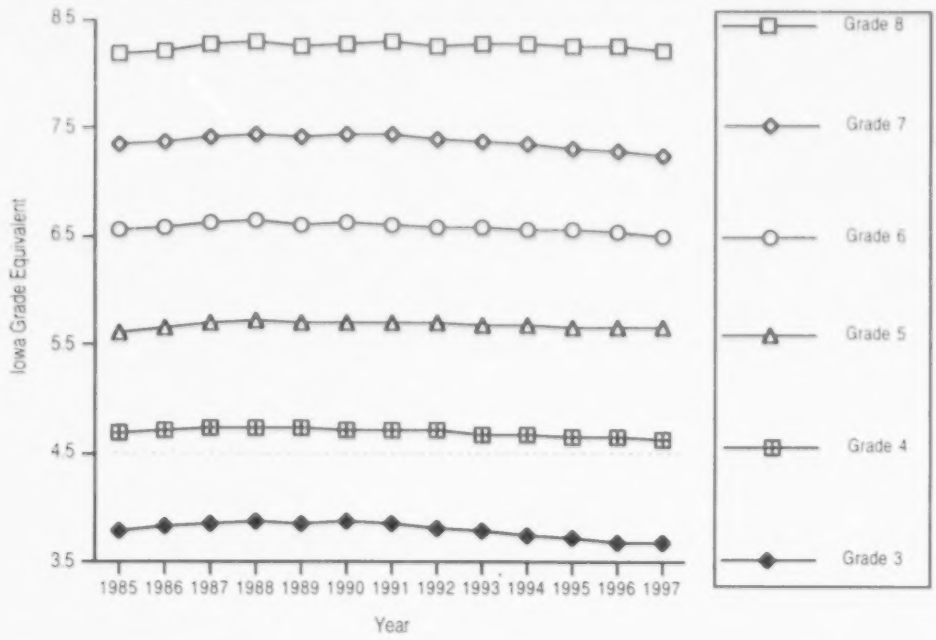


SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.
NOTE: BASELINE IS MIDYEAR OF 1965.

ITBS reading grade equivalent scores for students in grades 3-8 are shown in Figure 19. In general, reading achievement scores for grade levels three through eight have decreased slightly over the past five years.

Figure 19

Iowa ITBS Reading Scores Grades 3-8, 1985-1997
In Terms of 1965 "Base Year" Iowa Grade Equivalents



Source: Iowa Testing Programs, University of Iowa.
Note: Baseline is midyear of 1965.

Iowa Tests of Educational Development (ITED)

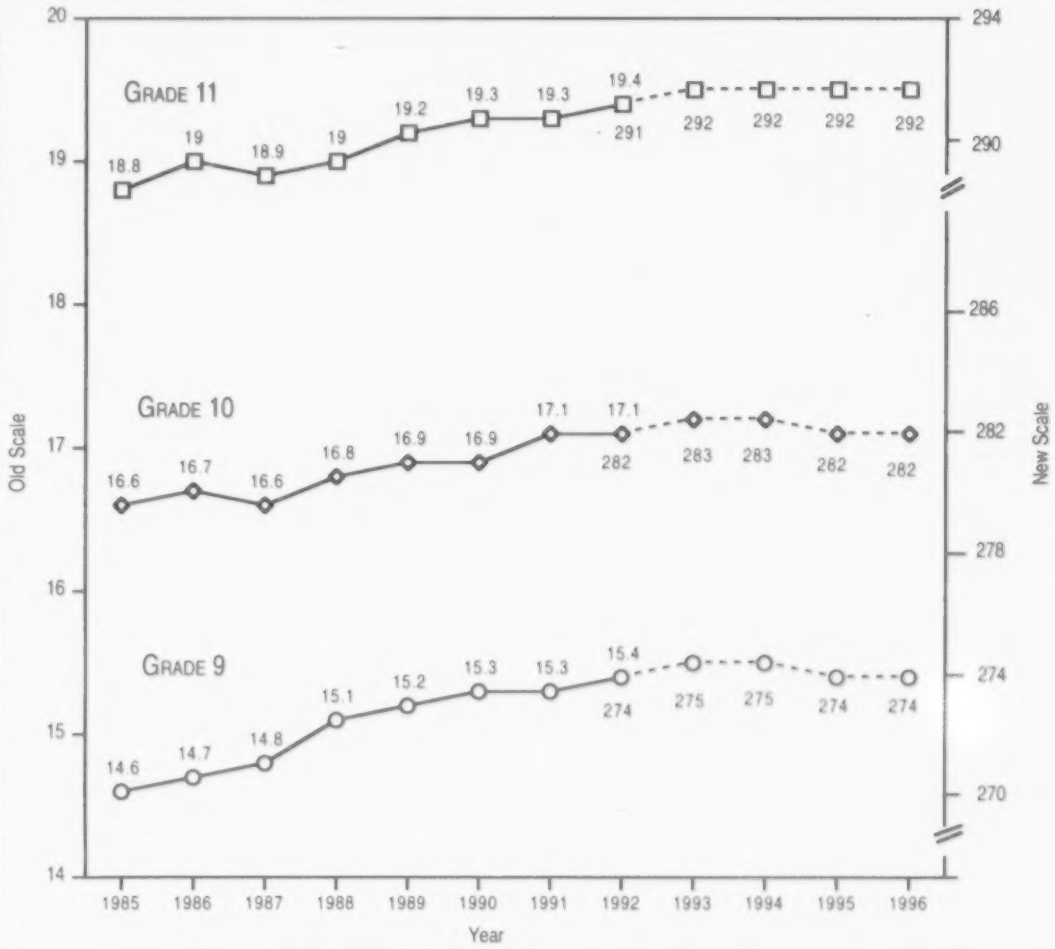
The ITED is a battery of seven tests: vocabulary, literary materials, expression, quantitative thinking, social studies, science, and sources of information. In addition, a content area reading score based on reading passages from literary materials, social studies, and science is reported. During the 1996-97 school year 319 of 353 public school districts operating high school programs and 36 nonpublic high schools participated in ITED testing. A total of 92,461 Iowa students in grades 9-12 were tested.

ITED trend data are presented in Figures 20, 21, 22, and 23 for the years 1985-1996. Figure 20 reflects ITED average composite scores for grades 9, 10, and 11. For grades 9, 10, and 11 composite scores have trended higher over the period. Average ITED quantitative thinking and science scores are presented in Figures 21 and 22. For grades 9, 10, and 11 scores in both quantitative thinking and science have generally shown a gradual upward trend since 1987. Average ITED reading scores for

students in grades 9-11, like quantitative thinking and science scores, have also, in general, shown a gradual upward trend since 1987 (Figure 23). Over the last five years ITED scores, overall, have remained relatively stable.

Figure 20

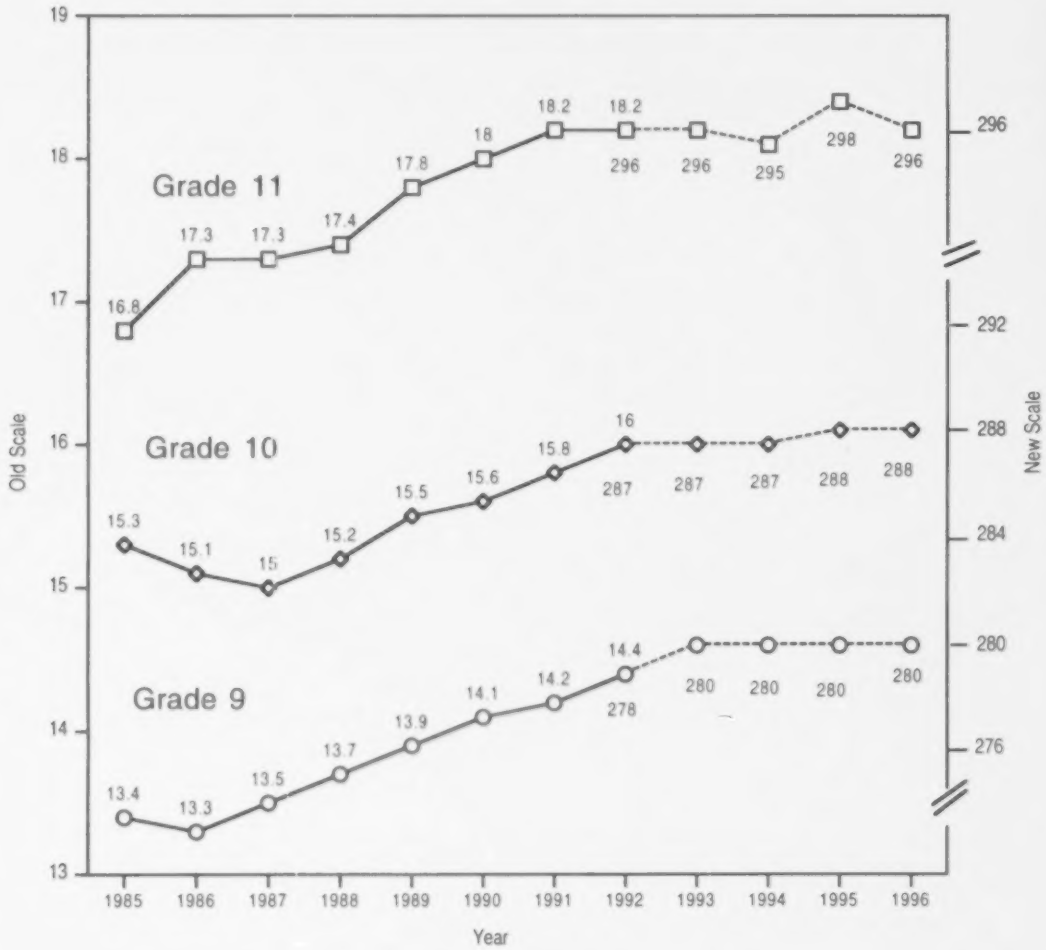
IOWA ITED AVERAGE COMPOSITE SCORES
1985-1996



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.
NOTE: IN 1993 NEW SCALE SCORES WERE DEVELOPED FOR ITED, THEREFORE BOTH OLD AND NEW SCALES ARE SHOWN SO THAT A CONSISTENT TREND LINE CAN BE PROVIDED.

Figure 21

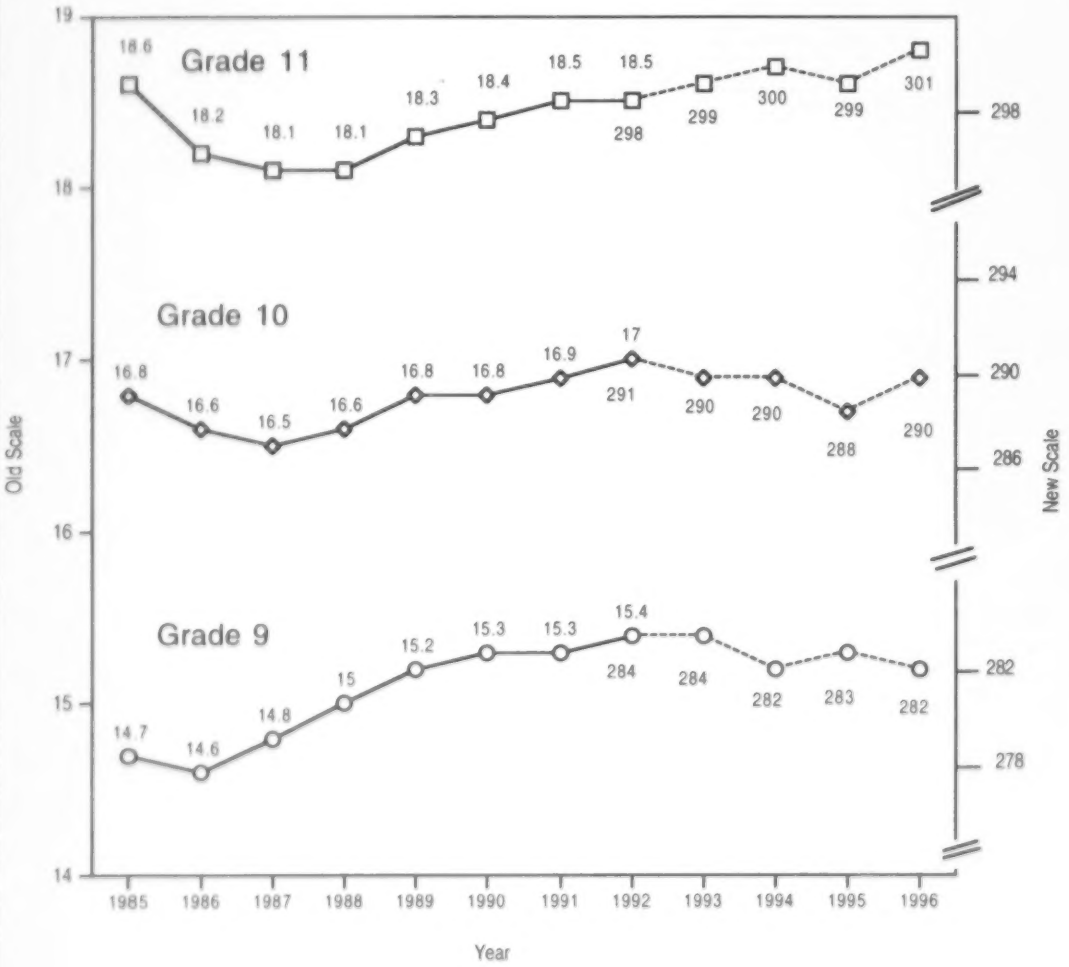
Iowa ITED Average Quantitative Thinking Scores 1985-1996



SOURCE: Iowa Testing Programs, University of Iowa.
NOTE: In 1993 new scale scores were developed for ITED, therefore both old and new scales are shown so that a consistent trend line can be provided.

Figure 22

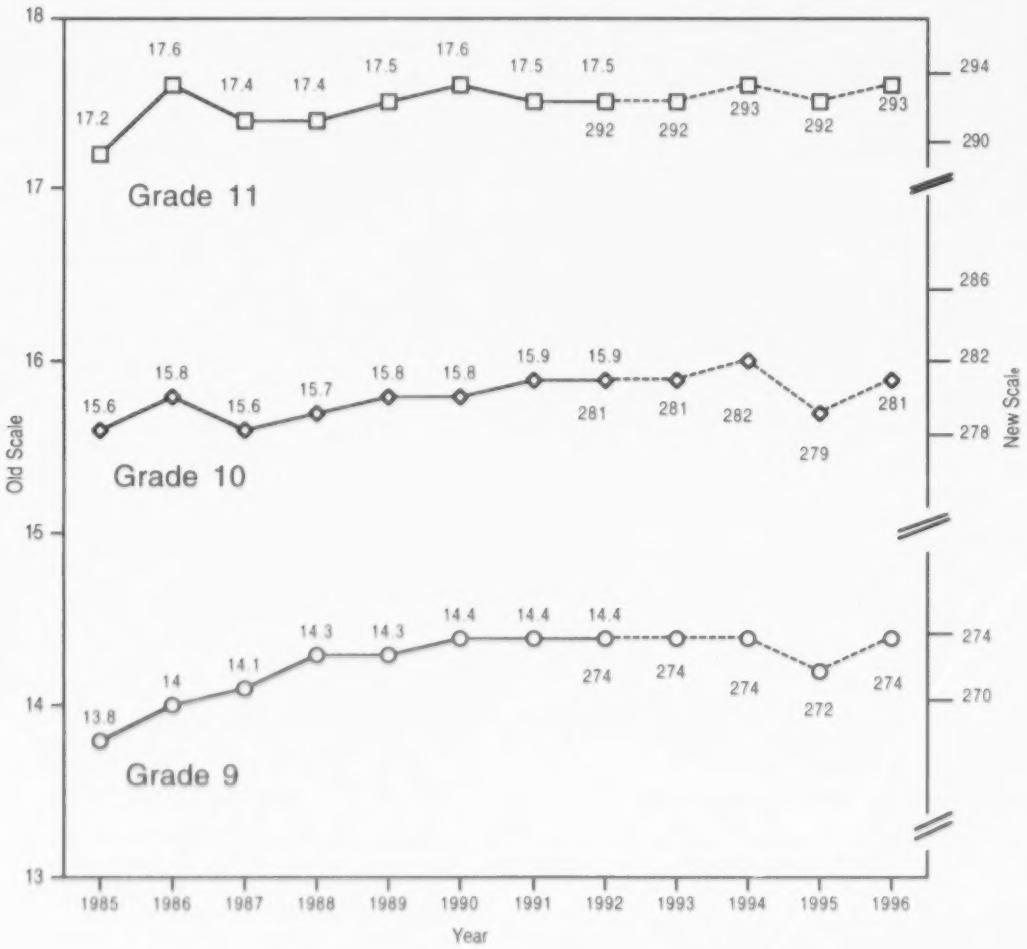
IOWA ITED AVERAGE SCIENCE SCORES 1985-1996



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.
NOTE: IN 1993 NEW SCALE SCORES WERE DEVELOPED FOR ITED, THEREFORE BOTH OLD AND NEW SCALES ARE SHOWN SO THAT A CONSISTENT TREND LINE CAN BE PROVIDED.

Figure 23

Iowa ITED Average Content Area Reading Scores 1985-1996



SOURCE: Iowa Testing Programs, University of Iowa.
NOTE: In 1993 new scale scores were developed for ITED, therefore both old and new scales are shown so that a consistent trend line can be provided.

ITBS and ITED Achievement Level Distributions

For the 1996-97 school year, Iowa Test of Basic Skills (ITBS) and Iowa Test of Educational Development (ITED) results were reported in terms of achievement levels in addition to average scores. A major advantage of reporting achievement level distributions, according to Iowa Testing Program staff, is that "the performance of high and low achieving groups of students can be tracked over time, while the use of average scores alone permits only the tracking of the average student."

Iowa Testing Program staff state that, "Scores are reported by combining pairs of scores for consecutive years for several reasons. The merging of test results from two years provides greater stability than would be apparent if results from each single year were used. Because not all schools test every year in each of the three grade levels used for reporting (grades 4, 8, and 11), annual statewide data are subject to fluctuations due to inconsistent annual testing patterns. Two-year averages help overcome the problem."

The information on achievement level distributions is presented in Figures 24 through 29 and is based on an annual participation of 37,000 fourth grade students, 34,000 eighth grade students, and 26,000 eleventh grade students. The results reflect nonpublic as well as public school students.

The descriptions for grade levels 4, 8 and 11 and the subject areas of reading and mathematics are different and, therefore, comparisons from one grade to the next and from one subject area to another are not appropriate. The descriptions of representative student performance for the grade level and subject area achievement levels accompany each figure that displays results of student achievement levels.

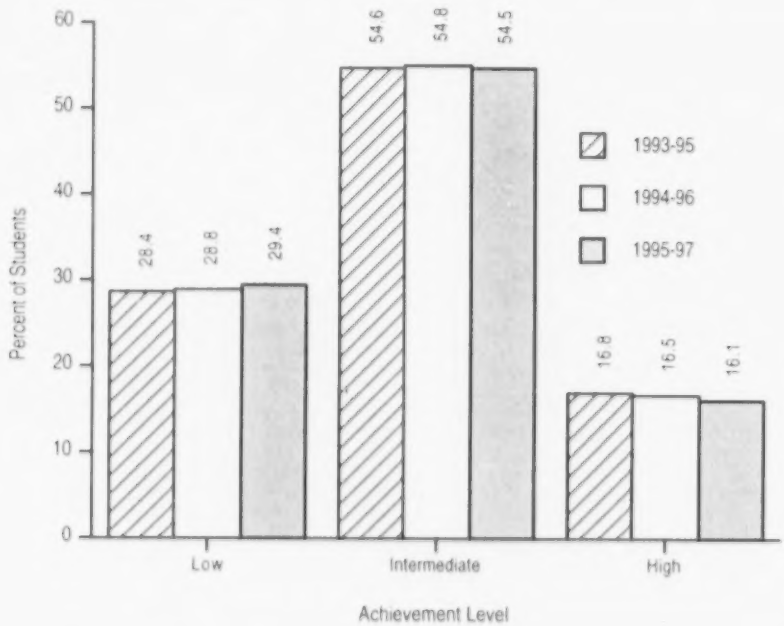
Achievement Levels for Reading Comprehension

Grade 4

Figure 24 displays reading achievement level distributions of Iowa fourth grade students for three two year periods; 1993-95, 1994-96, and 1995-97. The percentage of students at each of the three achievement levels has been essentially stable for the three, two-year periods.

Figure 24

ITBS Reading Comprehension Iowa Achievement Levels
Grade 4



SOURCE: Iowa Testing Programs, University of Iowa.

NOTES: These descriptions indicate how the typical grade 4 student at each achievement level performs with respect to the ITBS Reading Comprehension test:

HIGH PERFORMANCE LEVEL
Understands factual information; draws conclusions and makes inferences about the motives and feelings of characters; identifies the main idea; evaluates the style and structure of the text; and interprets nonliteral language.

INTERMEDIATE PERFORMANCE LEVEL
Understands some factual information; sometimes can draw conclusions and make inferences about the motives and feelings of characters; and is beginning to be able to identify the main idea, evaluate the style and structure of the text, and interpret nonliteral language.

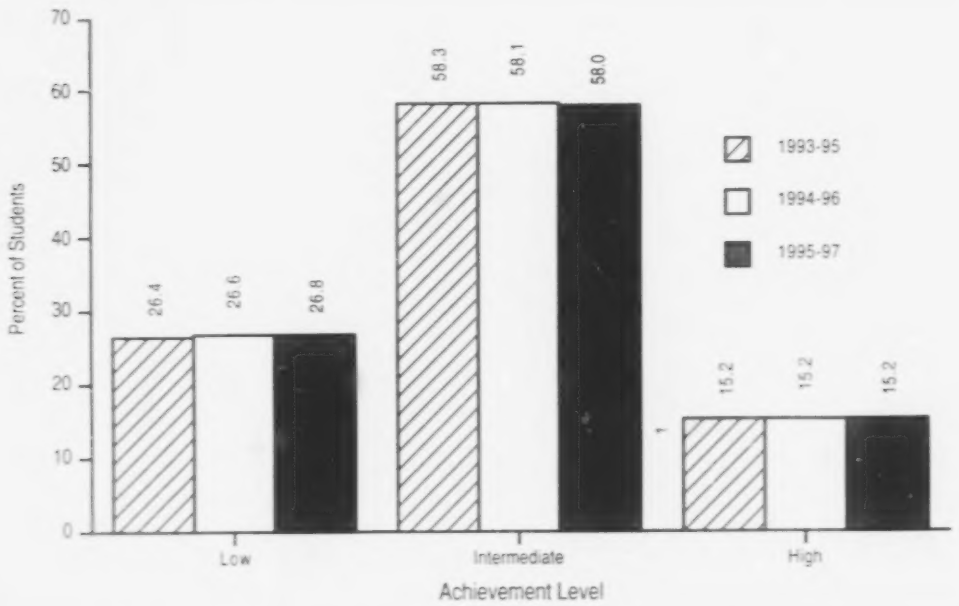
LOW PERFORMANCE LEVEL
Understands little factual information; seldom draws conclusions or makes simple inferences about characters; rarely grasps the main idea, evaluates the style and structure of the text, or interprets nonliteral language.

Grade 8

Reading achievement level distributions for Iowa eighth grade students are presented in Figure 25. The percentage of students classified as low, intermediate, and high performers generally remained unchanged over the three, two-year time periods.

Figure 25

ITBS Reading Comprehension Iowa Achievement Levels
Grade 8



SOURCE: Iowa Testing Programs, University of Iowa.

NOTES: These descriptions indicate how the typical grade 8 student at each achievement level performs with respect to the ITBS Reading Comprehension test:

HIGH PERFORMANCE LEVEL
Understands factual information; draws conclusions and makes inferences about the motives and feelings of characters; makes applications to new situations; identifies the main idea; evaluates the style and structure of the text; and interprets nonliteral language.

INTERMEDIATE PERFORMANCE LEVEL
Understands some factual information; sometimes can draw conclusions, make inferences about the motives and feelings of characters, and apply what has been read to new situations; and sometimes can identify the main idea, evaluate the style and structure of the text, and interpret nonliteral language.

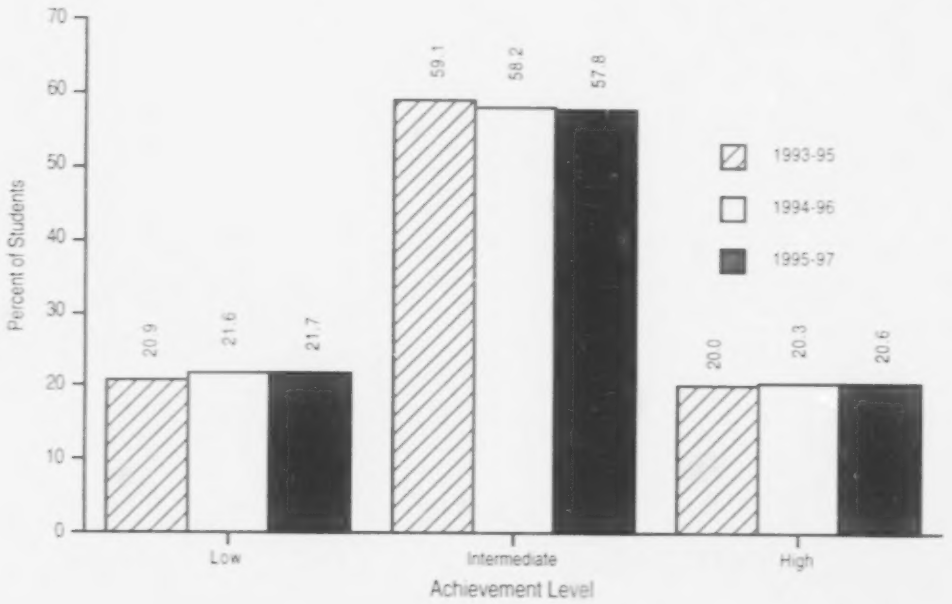
LOW PERFORMANCE LEVEL
Understands little factual information; can seldom draw conclusions or make simple inferences about characters; usually cannot apply what has been read to new situations; can rarely grasp the main idea, evaluate the style and structure of the text, and interpret nonliteral language.

Grade 11

The distribution of Iowa eleventh grade reading achievement is depicted in Figure 26. Little change occurred in the percentages of students classified as low, intermediate, and high across the period from 1993-95 through 1995-97.

Figure 26

ITED Reading Iowa Achievement Levels
Grade 11



SOURCE: Iowa Testing Programs, University of Iowa.

NOTES: These descriptions indicate how the typical grade 11 student at each achievement level performs with respect to the ITED test tasks that determine the Content Area Reading score.

HIGH PERFORMANCE LEVEL
Understands factual information; infers the traits and feelings of characters; identifies the main idea; identifies author viewpoint and style; interprets nonliteral language; and judges the validity of conclusions.

INTERMEDIATE PERFORMANCE LEVEL
Understands some factual information; sometimes can make inferences about characters, identify the main idea, and identify author viewpoint and style; occasionally can interpret nonliteral language and judge the validity of conclusions.

LOW PERFORMANCE LEVEL
Understands little factual information; seldom makes simple inferences, rarely grasps the main idea; and usually cannot identify author viewpoint and style, interpret nonliteral language, or judge the validity of conclusions.

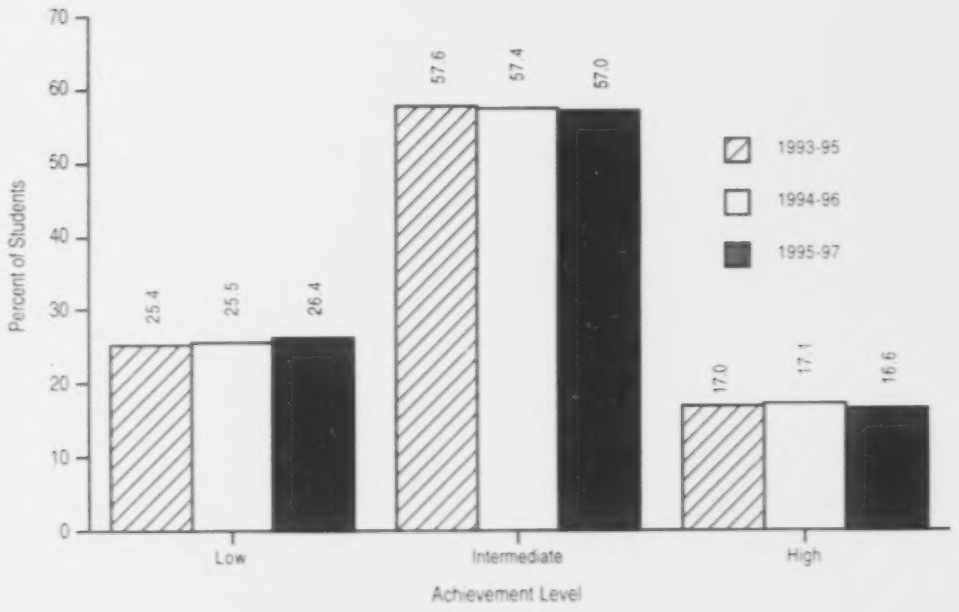
Achievement Levels for Mathematics

Grade 4

The distribution of Iowa fourth grade student mathematics achievement reflects that the percentage of low, intermediate, and high achieving students has remained essentially stable across the three points in time from 1993-95 to 1995-97 (Figure 27).

Figure 27

ITBS MATHEMATICS IOWA ACHIEVEMENT LEVELS
GRADE 4



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: THESE DESCRIPTIONS INDICATE HOW THE TYPICAL GRADE 4 STUDENT AT EACH ACHIEVEMENT LEVEL PERFORMS WITH RESPECT TO THE ITBS TEST TASKS THAT DETERMINE THE MATH TOTAL SCORE:

HIGH PERFORMANCE LEVEL
UNDERSTANDS MATH CONCEPTS, SOLVES COMPLEX WORD PROBLEMS, USES VARIOUS ESTIMATION METHODS, AND IS LEARNING TO INTERPRET DATA FROM GRAPHS AND TABLES.

INTERMEDIATE PERFORMANCE LEVEL
IS DEVELOPING AND UNDERSTANDING OF MOST MATH CONCEPTS, IS DEVELOPING THE ABILITY TO SOLVE SIMPLE AND COMPLEX WORD PROBLEMS AND TO USE ESTIMATION METHODS, AND IS BEGINNING TO DEVELOP THE ABILITY TO INTERPRET DATA FROM GRAPHICS AND TABLES.

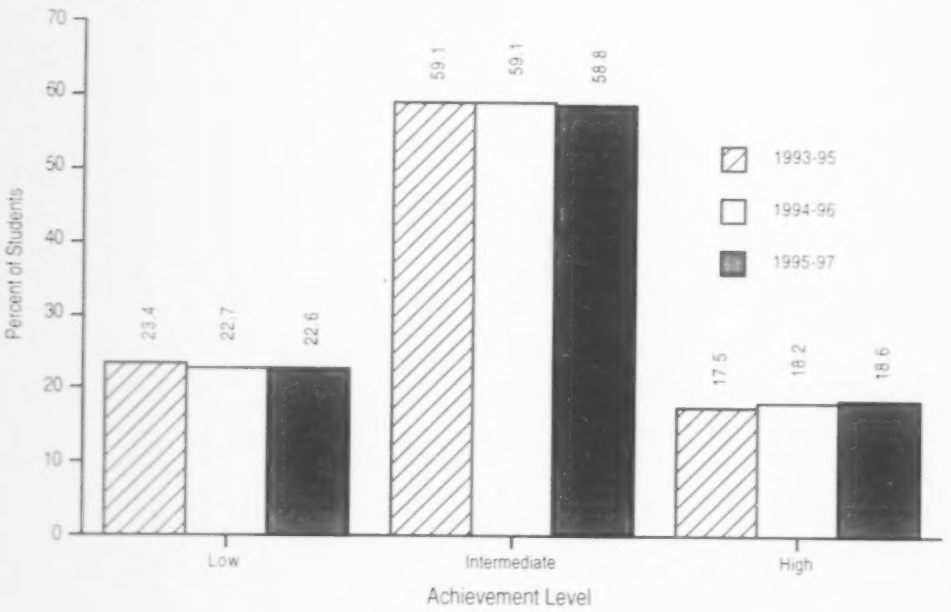
LOW PERFORMANCE LEVEL
IS BEGINNING TO DEVELOP AN UNDERSTANDING OF MANY MATH CONCEPTS AND AN ABILITY TO SOLVE SIMPLE WORD PROBLEMS, IS GENERALLY UNABLE TO USE ESTIMATION METHODS, AND IS SELDOM ABLE TO INTERPRET DATA FROM GRAPHS AND TABLES.

Grade 8

Mathematics achievement distributions for Iowa eighth grade students for the three, two-year periods from 1993-95 to 1995-97 are reflected in Figure 28. Little change is noted for any of the distributions across the period.

Figure 28

ITBS Mathematics Iowa Achievement Levels
Grade 8



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: THESE DESCRIPTIONS INDICATE HOW THE TYPICAL GRADE 8 STUDENT AT EACH ACHIEVEMENT LEVEL PERFORMS WITH RESPECT TO THE ITBS TEST TASKS THAT DETERMINE THE MATH TOTAL SCORE.

HIGH PERFORMANCE LEVEL
UNDERSTANDS MATH CONCEPTS AND IS DEVELOPING THE ABILITY TO SOLVE COMPLEX WORD PROBLEMS, USE A VARIETY OF ESTIMATION METHODS AND INTERPRET DATA FROM GRAPHS AND TABLES.

INTERMEDIATE PERFORMANCE LEVEL
IS BEGINNING TO DEVELOP AN UNDERSTANDING OF MOST MATH CONCEPTS AND TO DEVELOP THE ABILITY TO SOLVE WORD PROBLEMS, USE A VARIETY OF ESTIMATION METHODS, AND INTERPRET DATA FROM GRAPHS AND TABLES.

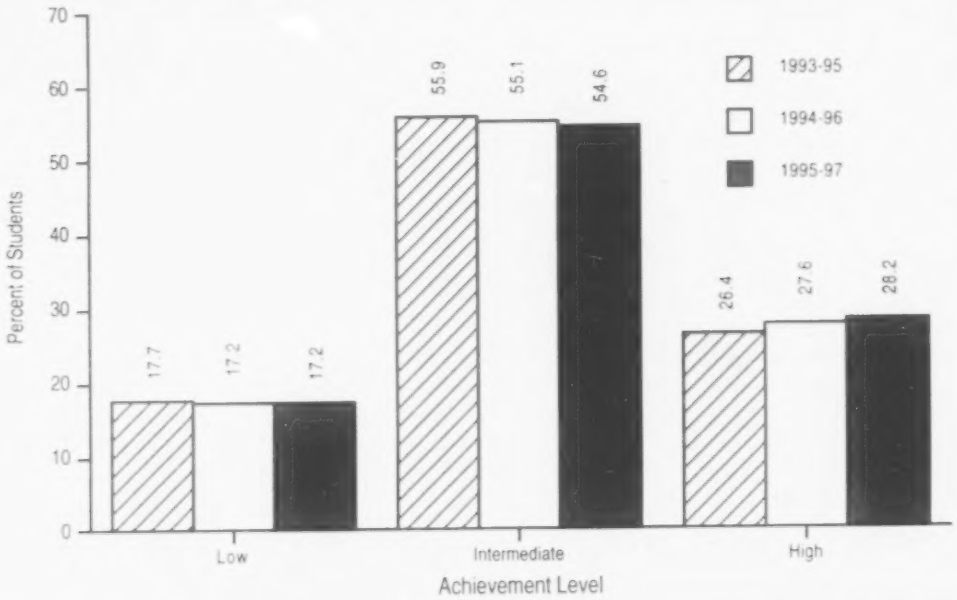
LOW PERFORMANCE LEVEL
UNDERSTANDS LITTLE ABOUT MATH CONCEPTS, IS UNABLE TO SOLVE MOST SIMPLE WORD PROBLEMS OR USE ESTIMATION METHODS, AND IS SELDOM ABLE TO INTERPRET DATA FROM GRAPHS AND TABLES.

Grade 11

The mathematics achievement distribution of Iowa eleventh grade students for each of the three, two-year reporting periods from 1993-95 to 1995-97 are presented in Figure 29. The achievement distributions remained relatively unchanged for the three reporting periods.

Figure 29

ITED Mathematics Iowa Achievement Levels
Grade 11



SOURCE: Iowa Testing Programs, University of Iowa.

NOTES: These descriptions indicate how the typical grade 11 student at each level performs with respect to concepts and problems in the ITED Quantitative Thinking test.

HIGH PERFORMANCE LEVEL
Understands how to apply math concepts and procedures, makes inferences with quantitative information, and solves a variety of novel quantitative reasoning problems.

INTERMEDIATE PERFORMANCE LEVEL
Is beginning to develop the ability to apply a variety of math concepts and procedures, make inferences about quantitative information, and solve a variety of novel quantitative reasoning problems.

LOW PERFORMANCE LEVEL
Demonstrates little understanding about how to apply math concepts and procedures, generally cannot make inferences with quantitative information, and cannot solve most novel quantitative reasoning problems.

In summary, the distributions of achievement levels for students in grades four, eight, and eleven, in the areas of reading and mathematics have remained relatively stable across the three reporting periods from 1993-95 through 1995-97.

American College Testing (ACT) Assessments

The American College Testing (ACT) Assessments are the predominate college entrance examinations taken by Iowa students. The ACT Assessment Program is composed of English, mathematics, reading, and science reasoning tests. A composite score is generated from the four tests. Scores on the ACT range from 0 (zero) to 36. The ACT program also provides for reporting based on the type of academic program completed by students. Core and non-core programs comprise the two program types. A core curriculum program requires four years of English, three years of mathematics, social studies, and natural science. High school programs that require less than core standards are reported as non-core in the information and comparisons provided by ACT.

In 1997, 64 percent of Iowa's graduating class participated in the ACT Assessment Program. Nearly 24,000 students took the ACT examinations in 1997. Nationally 959,301 students took the ACT. National data presented in this section are based on a population of 35 percent of the 1997 graduating class.

Iowa and national ACT average composite scores from 1989 through 1995 were generally stable. After 1995 both Iowa scores and the scores for the nation have shown a two year upward trend, with Iowa 1997 ACT composite scores representing the highest composite score for Iowa students since 1986, which was the all-time high. Iowa scores have continually been above scores for the nation over the period. In general, the rate of Iowa students participating in the ACT Assessment Program has shown a gradual increase from 1989 through 1997 increasing from 60.5 percent to 64 percent for the last three years (Table 65).

Table 65

IOWA AND NATIONAL ACT AVERAGE COMPOSITE SCORES
1989 - 1997

Year	Iowa Composite ACT Score	Percent Iowa Student Participation*	Nation Composite ACT Score	Percent Nation Student Participation
1989	21.8	60.5%	20.6	NA%
1990	21.8	61.2	20.6	NA
1991	21.7	61.0	20.6	NA
1992	21.6	62.0	20.6	NA
1993	21.8	61.5**	20.7	NA
1994	21.9	62.0	20.8	NA
1995	21.8	64.0	20.8	37.0
1996	21.9	64.0	20.9	35.0
1997	22.1	64.0	21.0	35.0

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, ACT ASSESSMENT (1989-97) RESULTS, SUMMARY REPORT IOWA.
NOTES: *FROM 1989-1992, AND 1994-1997 ACT NEWS RELEASES.
**1993 ESTIMATED PERCENTAGE IS BASED ON IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILE.

Average Iowa ACT scores by type of high school program completed are shown in Table 66. For all ACT tests, Iowa students taking the core program in high school scored an average of 3.1 points higher than Iowa students completing non-core programs. This mirrors the trend nationally. Both core and non-core Iowa students scored higher than their national counterparts over the period from 1989 through 1997.

Table 66

1997 Average Iowa ACT Scores by Type of High School Program Taken by Students

ACT Tests	High School Program Type			
	Core Program[1]		Non-Core Program	
	Iowa	Nation	Iowa	Nation
English	22.5	21.5	19.3	18.6
Math	22.7	21.8	19.3	18.7
Reading	23.5	22.5	20.3	19.7
Science	23.3	22.1	20.5	19.6
Composite	23.1	22.1	20.0	19.3

Source: 1997 ACT Assessment Results, Summary Report Iowa, American College Testing Program

Notes: [1] A "Core" program is defined as a typical college preparatory program including:
- English (four years or more)
- Mathematics (three years or more)
- Social Studies (three years or more)
- Natural Sciences (three years or more)

The participation rate for the Iowa graduating class of 1997 was 64 percent.

Figure 30 portrays the relationships among core, non-core, and total ACT scores, and also reflects the percentage of Iowa students taking the core program. The percentage of Iowa students taking the core program has increased from 53.1 percent to 66 percent in 1997. The corresponding scores for core students have decreased over the period from 23.5 in 1990 to 23.1 in 1997, although scores for Iowa core students have increased in each of the last two years. Scores for non-core students were consistently lower from 1990 to 1997 compared to core students and were essentially stable from 1990 through 1996 showing an increase in 1997.

Figure 30

Average ACT Composite Scores vs. Percent of Students Taking Core Program for Iowa High School Graduating Classes, 1990-1997

Source: American College Testing Program, the High School Profile Reports for Iowa, 1990-1997.

Average ACT composite score comparisons for Iowa and other midwest states are reported for 1996 and 1997 in Table 67. Among the midwest states in 1997, Iowa students were tied with Minnesota students for the second highest ACT composite scores. Wisconsin students had the highest scores. Only one state, Minnesota, with 71 percent, had a higher percentage of students taking the core program. In 1996 two midwest states had a higher percentage of students taking core programs than Iowa. The average for the nation in both 1996 and 1997 was 59 percent of students taking core programs.

Table 67

ACT Average Composite Scores for Iowa, the Nation and Midwest States — 1996 and 1997

	1996			1997		
Nation & State	ACT Composite	% of Graduates Tested	% Core Completers out of Total Tested	ACT Composite	% of Graduates Tested	% Core Completers out of Total Tested
Nation	20.9	35%	59%	21.0	36%	59%
Iowa	21.9	64	66	22.1	64	66
Illinois	21.2	67	50	21.2	69	49
Kansas	21.3	70	49	21.7	74	52
Minnesota	22.1	59	72	22.1	60	71
Missouri	21.4	63	57	21.5	64	58
Nebraska	21.4	72	59	21.7	73	63
North Dakota	21.3	77	68	21.4	78	64
South Dakota	21.4	65	63	21.3	68	65
Wisconsin	22.1	63	61	22.3	64	62

Source: American College Testing Program, ACT 1996 and 1997 Assessment Results.

Iowa ACT Scores by Enrollment Category, Grade Level and Gender

Iowa ACT scores by enrollment category are depicted in Table 68. In general, average scores on all ACT tests increased with successive increases in enrollment categories through 2,500-7,499. Average test scores for students in districts with en-

Table 68

1997 Iowa Average ACT Scores by Enrollment Category

			ACT Scores				
Enrollment Category	Number	% in Core	English	Math	Reading	Science Reasoning	Composite
<250	115	67.0%	20.1	20.2	21.3	20.9	20.7
250-399	642	65.6	20.7	20.7	21.6	21.6	21.3
400-599	1,829	59.7	20.8	20.9	21.8	21.9	21.4
600-999	4,289	61.0	21.1	21.1	22.1	22.2	21.8
1,000-2,499	5,673	56.8	21.4	21.5	22.4	22.5	22.1
2,500-7,499	4,040	65.8	22.0	22.4	23.1	22.9	22.7
7,500+	4,059	68.0	21.5	22.0	22.6	22.5	22.3
Not Reported	3,062	60.6					
State	23,709	66.0	21.4	21.5	22.4	22.4	22.1

Source: American College Testing Program, ACT Assessment Magnetic Tape; Iowa Department of Education, Certified Enrollment file, 1996-97.

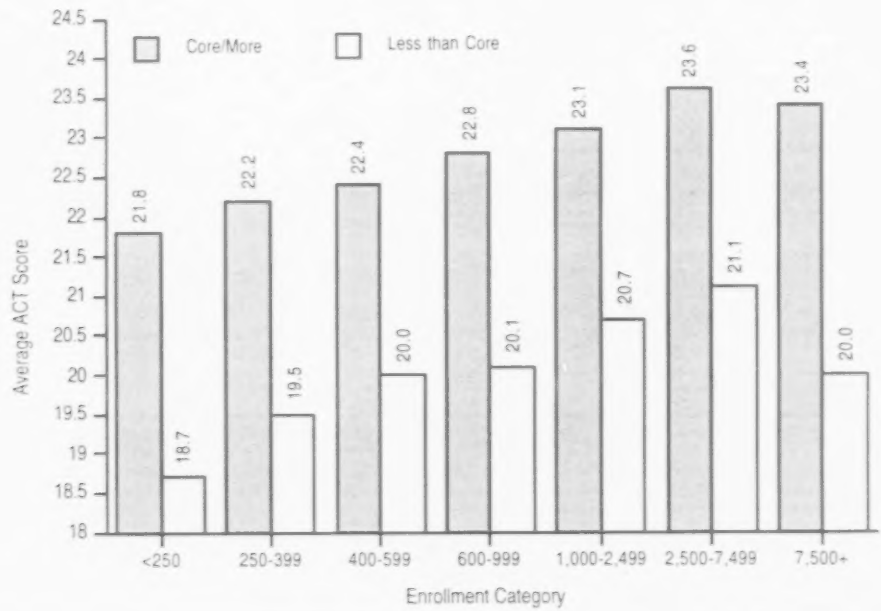
Note: The participation rate for the Iowa graduating class of 1997 was 64 percent.

rollments of 7,500 and above were generally higher than scores for lower enrollment categories except the category of 2,500-7,499. The percent of students meeting core requirements varied across enrollment category and no pattern with respect to enrollment and the percent of students taking core programs was apparent. Similar patterns were reflected for 1996 with respect to ACT scores across enrollment categories.

A comparison of 1997 Iowa ACT average composite scores by course of study (core and non-core) is reflected in Figure 31 by enrollment category. The same pattern of increased average scores for successive increases in enrollment category for both core and non-core students was noted. The exception, as with total scores, was that core and non-core scores for students in the largest enrollment categories were generally higher than in other enrollment categories except for the 2,500-7,499 enrollment category.

Figure 31

1997 Iowa Average ACT Composite Scores by Enrollment Category and Course of Study



SOURCE: American College Testing Program, ACT Assessment Magnetic Tape, 1997; Iowa Department of Education, Certified Enrollment File 1996-97.

NOTES: State Average ACT Comp. Scores for Those with Core or More = 23.1; for Those with Less than Core = 20.0. The participation rate for the Iowa graduating class of 1997 was 64 percent.

Iowa average 1997 ACT scores by grade level reflect that eleventh graders outperformed twelfth graders on all tests. This was also true for the previous year. In 1997, 52.9 percent of ACT test-takers were eleventh graders and 45.6 percent were

twelfth graders (Table 69). A comparison of Iowa and U.S. 1997 average composite ACT scores by grade level is reported in Figure 32. The table reflects that for the nation as well as for Iowa, eleventh graders scored higher than twelfth graders. It also indicates that both Iowa eleventh and twelfth graders scored higher than their national counterparts. It should be noted that, on average more Iowa juniors took the ACT than seniors. In Iowa about 53 percent of the juniors took the ACT compared to nearly 46 percent of the seniors. Over the period from 1990 to 1997 the percent of Iowa test-takers who were juniors was nearly 20 percentage points higher than for the nation, 53 percent and 34 percent respectively.

Table 69

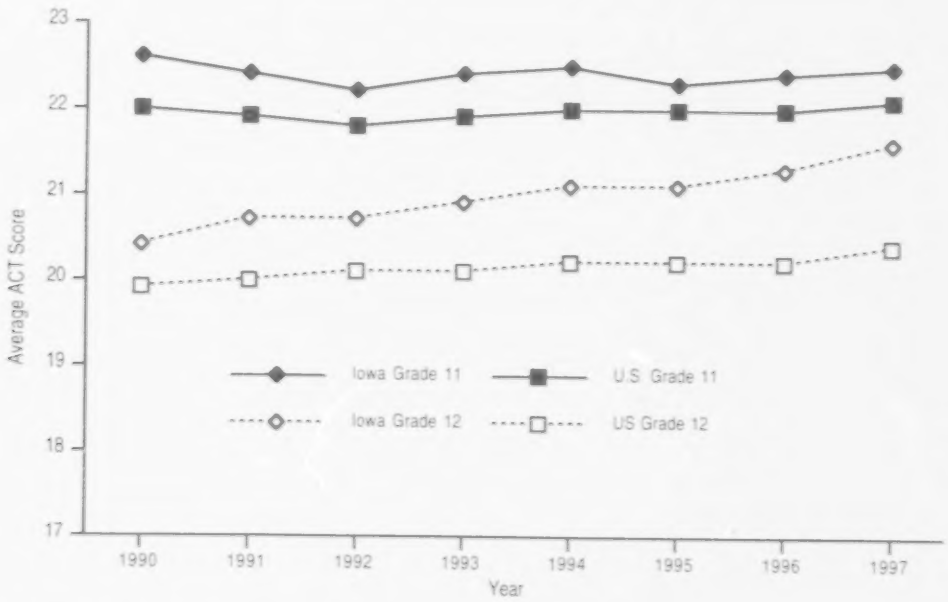
1997 Iowa Average ACT Scores by Grade

Grade	Number	Percent	ACT Scores English	Math	Reading	Science Reasoning	Composite
11th	12,553	52.9%	21.8	21.7	23.0	22.9	22.5
12th	10,813	45.6	21.0	21.3	21.7	21.8	21.6
Other	343	1.5					

Source: American College Testing Program, ACT Assessment Magnetic Tape, 1997.
Note: The participation rate for the Iowa graduating class of 1997 was 64 percent.

Figure 32

ACT Average Composite Scores by Grade

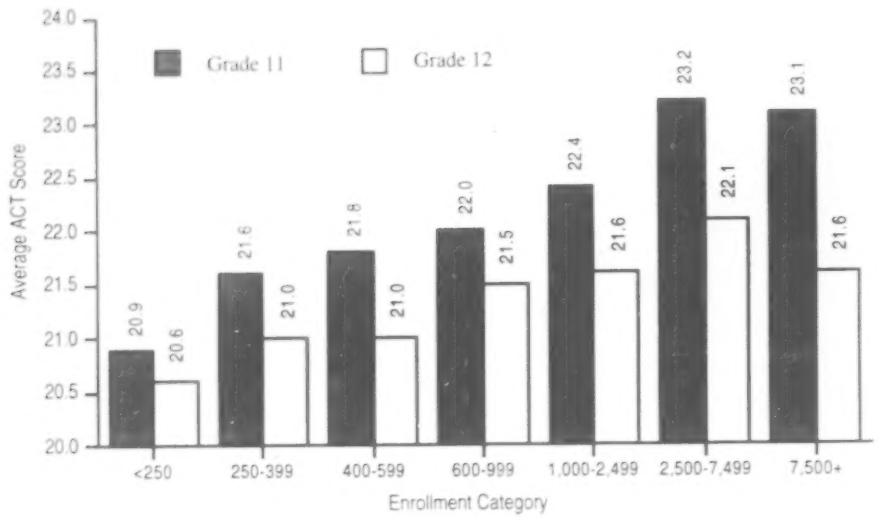


Source: American College Testing Program, ACT High School Profile Reports for Iowa, 1990-97.
Note: The participation rate for the Iowa graduating class of 1997 was 64 percent.

Figure 33 compares 1997 ACT average composite scores for Iowa eleventh and twelfth grade students by enrollment category. In general, ACT scores for eleventh grade students increased with each successively larger enrollment category, as was the trend for all Iowa ACT test-takers when ACT scores were compared by enrollment category (See Table 68). A similar trend was evident for twelfth grade students.

Figure 33

1997 Iowa ACT Composite Scores by Grade and Enrollment Category



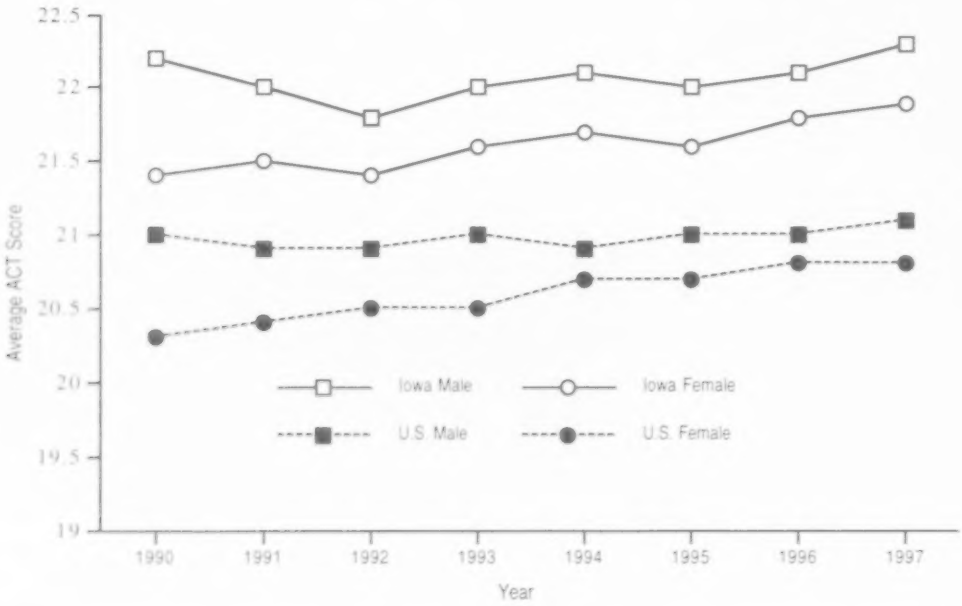
Source: American College Testing Program, ACT Assessment Magnetic Tape, 1997; Iowa Department of Education, Certified Enrollment File, 1996-97.

Note: State Average ACT Composite Scores for 11th grade = 22.5; for 12th grade = 21.6.

Average ACT composite scores by gender for Iowa and for the nation are reported in Figure 34. Scores are reported for 1990 to 1997. Males performed better than females in Iowa and in the nation. Both Iowa males and females performed better than their national counterparts over the period. For females, however, the gap between Iowa performance levels and performance levels for the nation began to narrow in 1994. More females took the ACT for both Iowa and for the nation. For the period from 1990 through 1997 the percentage of Iowa females taking the ACT ranged from 53 to 55 percent compared to 54 to 56 percent nationally. The range in the percentage of males taking the ACT was 45 to 47 percent for Iowa closely paralleling the national range of 44 to 46 percent.

Figure 34

ACT Average Composite Scores by Gender



SOURCE: AMERICAN COLLEGE TESTING PROGRAM, ACT HIGH SCHOOL PROFILE REPORTS FOR IOWA, 1990-97.
NOTE: THE PARTICIPATION RATE FOR THE IOWA GRADUATING CLASS OF 1997 WAS 64 PERCENT.

Iowa ACT performance by gender in 1997 on all ACT tests is reflected in Table 70. Males outperformed females in mathematics, science reasoning tests, and the composite test, while females performed better on the English and reading tests.

Table 70

1997 Iowa Average ACT Scores by Gender

			Average ACT Scores				
Gender	Number	Percent	English	Math	Reading	Science Reasoning	Composite
Female	12,844	54%	21.8	20.9	22.5	21.7	21.9
Male	10,865	46	21.0	22.3	22.3	23.1	22.3

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, ACT HIGH SCHOOL PROFILE REPORTS FOR IOWA, 1997.
NOTE: THE PARTICIPATION RATE FOR THE IOWA GRADUATING CLASS OF 1997 WAS 64 PERCENT.

Iowa Student ACT Scores compared to High School Performance

Iowa ACT average scores are compared to self-estimated high school grade point averages (GPA) in Table 71. In 1997, as in the two previous years, the highest GPA category was associated with the highest ACT test scores. Average ACT scores decreased with decreases in GPA categories. It should be noted that nearly 40 percent of Iowa students estimated their high school GPA to be 3.5 or higher and close to 30 percent of Iowa students tested estimated their GPA to be 3.0 to 3.49. A parallel trend was found when Iowa ACT composite scores were compared to self-estimated high school class rank (Figure 35).

Table 71

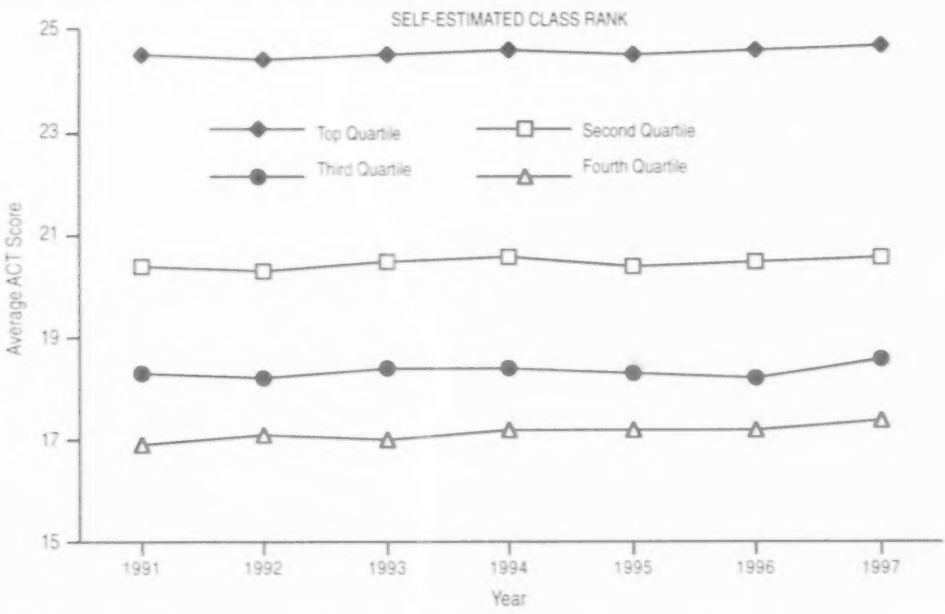
1997 Iowa Average ACT Scores vs. Self-Estimated High School Average GPA

			Average ACT Scores				
GPA	Number	Percent	English	Math	Reading	Science Reasoning	Composite
3.5+	9,331	39.7%	24.6	24.7	25.6	24.9	25.1
3.0 - 3.49	6,800	28.9	20.8	20.8	21.8	21.9	21.4
2.5 - 2.99	4,613	19.6	18.7	18.8	19.7	20.2	19.5
2.0 - 2.49	2,293	9.8	17.2	17.7	18.2	19.0	18.2
<2.0	479	2.0	16.1	16.7	17.1	18.3	17.2

Source: American College Testing Program, ACT High School Profile Report for Iowa, 1997.
Note: The participation rate for the Iowa graduating class of 1997 was 64 percent.

Figure 35

Iowa ACT Composite Scores vs. Self-Estimated High School Class Rank



Source: American College Testing Program, ACT High School Profile Report for Iowa, 1991-1997.

Scholastic Aptitude Tests (SAT)

The Scholastic Aptitude Test (SAT), published by The College Board, is a college entrance examination that is composed of SAT I and SAT II. Information presented in this section is from SAT I, the reasoning test. Both verbal and mathematics reasoning scores are derived. SAT scores range from 200 to 800. It should be noted that only a small percentage of Iowa students take the SAT primarily because it is not required by the colleges and universities that most Iowa students plan to attend.

The number of Iowa students taking the SAT has been increasing since 1994-95, up by just over 16 percent. In 1996-97, 1,971 students or 5.2 percent of Iowa twelfth graders took the SAT (Table 72). Table 72 also depicts the gender distribution of SAT test-takers. In 1996-97, 50.4 percent of test-takers were males and 49.6 percent were females. 1996-97 was the first year since 1991-92 where more males than females took the SAT.

Table 72

1997 Iowa SAT Report
Number of Iowa Test Takers by Gender, 1992-1997

Year	Total	Male		Female	
		N	%	N	%
1991-92	1,625	839	51.6%	786	48.4%
1992-93	1,556	742	47.7	814	52.3
1993-94	1,700	815	47.9	885	52.1
1994-95	1,695	788	46.5	907	53.5
1995-96	1,776	851	47.9	925	52.1
1996-97	1,971	993	50.4	978	49.6

Source: The College Board, 1997 Profile of SAT Program Test Takers.
Note: The Iowa participation rate in SAT for the class of 1997 was 5.2 percent.

Table 73 and Figure 36 present SAT verbal and mathematics scores for Iowa and for the nation. Iowa scores on the mathematics component of the SAT have been increasing since 1993-94, while Iowa verbal scores have remained essentially un-

Table 73

Eleven-Year Trends of Average SAT
Scores for Iowa and the Nation, 1987-1997

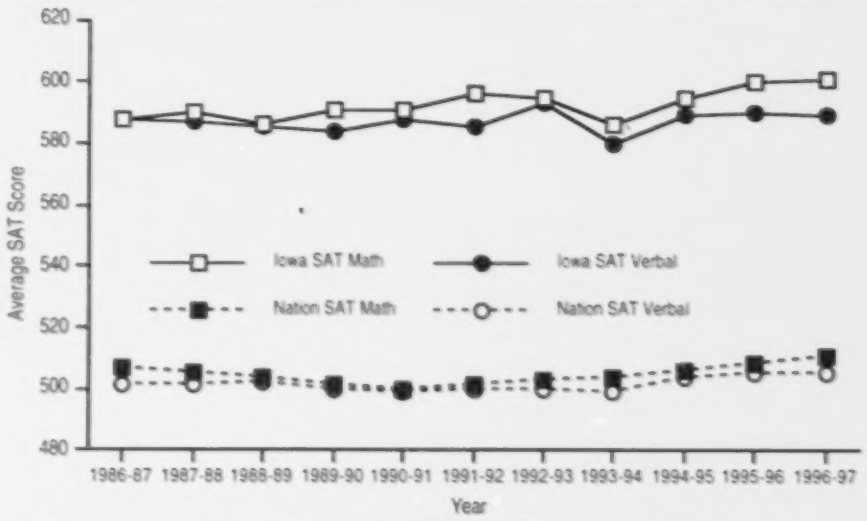
Year	SAT Verbal		SAT Math	
	Iowa	Nation	Iowa	Nation
1986-87	588	507	588	501
1987-88	587	505	590	501
1988-89	585	504	586	502
1989-90	584	500	591	501
1990-91	588	499	591	500
1991-92	585	500	596	501
1992-93	593	500	595	503
1993-94	580	499	586	504
1994-95	589	504	595	506
1995-96	590	505	600	508
1996-97	589	505	601	511

Source: The College Board, 1997 Profile of SAT Program Test Takers.
Note: The Iowa participation rate in SAT for the class of 1997 was 5.2 percent.

changed since 1994-95. From 1986-87 through 1996-97 both Iowa verbal and mathematics SAT scores have been substantially higher than scores for the nation. Since 1987-88 Iowa mathematics SAT scores have been higher than verbal scores. This trend has been evident for the nation as well, since 1991-92.

Figure 36

Eleven-Year Trends of SAT Scores (Iowa vs. Nation)



SOURCE: The College Board, 1997 Profile of SAT Program Test Takers.
NOTE: The Iowa participation rate in SAT for the class of 1997 was 5.2 percent.

Table 74 presents a comparison of average SAT scores for Iowa, the nation, and for midwest states. Iowa ranked first in the nation on both verbal and mathematics components of the SAT. The midwest states represented in Table 74 ranged from four percent of graduates taking the SAT in South Dakota to 14 percent in Illinois. Nationally, 42 percent of graduates took the SAT in 1997.

Table 74

Average SAT Scores for Iowa, the Nation and Midwest States — 1987, 1994-97

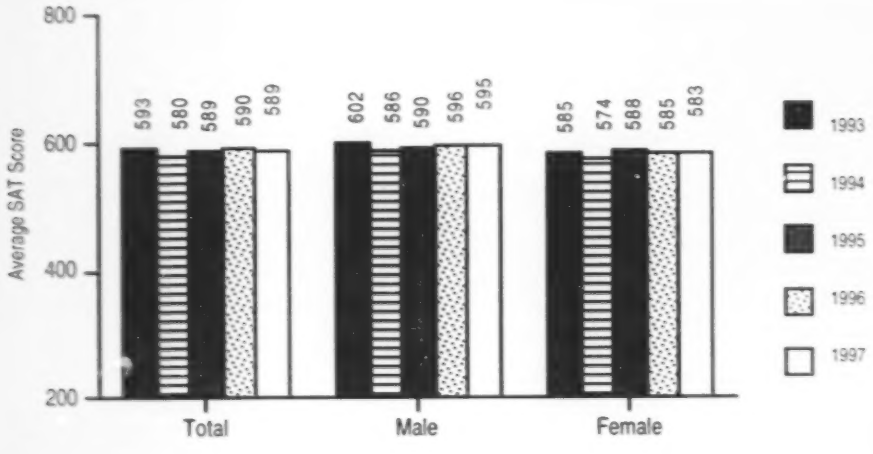
Nation and State	1987		1994		1995		1996		1997		% Graduates Taking SAT*
	V	M	V	M	V	M	V	M	V	M	
Iowa	588	586	580	586	589	595	590	600	589	601	5%
Nation	507	501	499	504	504	506	505	508	505	511	42
Illinois	539	540	553	562	563	574	564	575	562	578	14
Kansas	572	562	568	565	576	571	579	571	578	575	9
Minnesota	548	549	569	576	580	591	582	593	582	592	9
Missouri	549	538	560	554	569	566	570	569	567	568	9
Nebraska	563	562	557	559	568	570	567	568	562	564	9
North Dakota	583	573	570	573	587	602	596	599	588	595	5
South Dakota	587	577	558	563	579	576	574	566	574	570	4
Wisconsin	550	551	562	572	574	585	577	586	579	590	7
(Iowa Rank in Nation)											
	1	1	2	1	1	2	2	1	1	1	

SOURCE: The College Board, 1997 Profile of SAT Program Test Takers.
NOTE: *Based on the number of high school graduates in 1997 as projected by the Western Interstate Commission for Higher Education, and the Number in the Class of 1997.

Figures 37 and 38 compare Iowa SAT verbal and mathematics scores by gender over the last five years. The scores reflect that males have consistently performed better than females on both the verbal and mathematics components of the SAT. The differences in SAT scores have been greater in mathematics than in verbal tests.

Figure 37

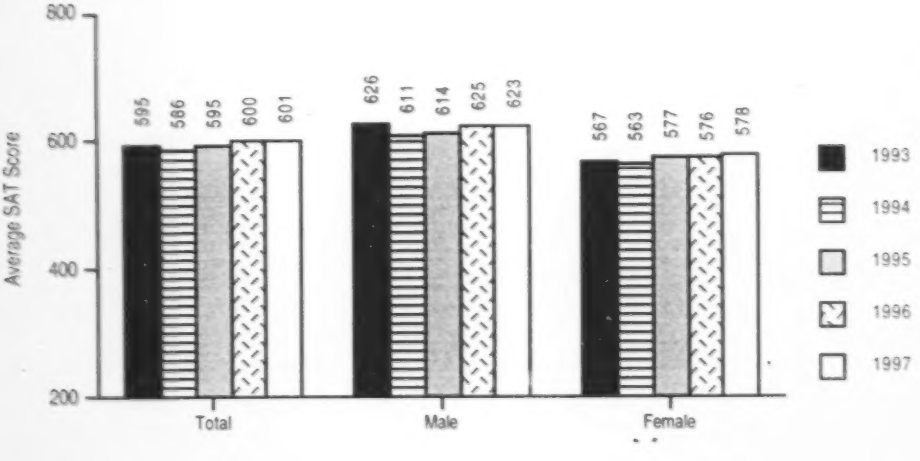
1997 Iowa SAT Report Verbal Average Scores by Gender



Source: The College Board, 1997 Profile of SAT Program Test Takers.
Note: The Iowa participation rate in SAT for the class of 1997 was 5.2 percent.

Figure 38

1997 Iowa SAT Report Mathematics Average Scores by Gender



Source: The College Board, 1997 Profile of SAT Program Test Takers.
Note: The Iowa participation rate in SAT for the class of 1997 was 5.2 percent.

Advanced Placement

The College Board administers the Advanced Placement (AP) Program which offers students in participating schools the opportunity to earn college credit for successfully completing AP courses taken in high school. Credit for the completion of AP courses is granted through participating colleges and universities.

Advanced placement scores are based on a five point scale. Following are the meanings associated with the scale scores: a score of five (5) indicates a student is extremely well qualified; four (4) indicates well qualified; three (3) indicates qualified; two (2) is interpreted as possibly qualified; and one (1) carries no recommendation.

About one-half of the nation's high schools participate in the AP Program. In 1996, over 800,000 students nationwide participated in the AP Program. In Iowa, 4,112 students took AP examinations in 1996, up 13.4 percent from the previous year (Table 75). The average increase in the number of AP examinations taken by Iowa students over the period since 1992 was 15.9 percent.

Table 75

Iowa Students Taking AP Examinations, 1988-1996

Year	Number of Students	Percent Increase from Prior Year
1988	1,059	—
1989	1,221	15.3
1990	1,797	47.2
1991	2,023	12.6
1992	2,289	13.1
1993	2,788	21.8
1994	3,037	8.9
1995	3,627	19.4
1996	4,112	13.4

Source: The College Board, Advanced Placement Program, Iowa Summary Reports, 1996.

Iowa ranked 42nd in 1996 in terms of the percentage of high schools participating in the AP Program (Table 76). The percentage of Iowa schools participating in AP has increased steadily since 1988 through 1995. The percentage of participating Iowa schools decreased slightly from 30 percent in 1995 to 29 percent in 1996. Nationally, 52 percent of high schools participated in AP, up from 44 percent in 1991. Table 77 reflects the number of AP examinations taken per 1,000 eleventh and twelfth grade students. In 1996 Iowa ranked 42.5 with 48 exams per 1,000 eleventh and twelfth grade students, up from 27 exams per 1,000 students in 1991. It should be noted that Iowa students can also earn college credit through participation in the Iowa Post Secondary Enrollment Options Program (further information on this program is detailed later in the student performance section) and by taking College Level Entrance Placement (CLEP) tests.

Table 76

Percent of Total Schools Participating in Advanced Placement

Rank Based on 1996 Data	State	Year					
		1996	1995	1994	1993	1992	1991
1	District of Columbia	100	100	78	81	76	97
2	New Jersey	85	83	80	78	77	75
3	Connecticut	84	80	78	78	77	77
4	Massachusetts	80	78	78	75	74	73
5	Rhode Island	74	73	68	63	66	59
6	New York	72	71	69	68	66	65
7	Maryland	71	69	72	69	68	68
9	Utah	70	70	74	68	69	63
9	South Carolina	70	70	67	66	65	65
9	Virginia	70	68	69	69	67	66
11	California	69	66	65	64	63	60
12.5	New Hampshire	68	69	52	60	58	53
12.5	Hawaii	68	65	65	72	68	65
14	Vermont	66	66	61	65	61	56
15	North Carolina	64	64	67	67	60	57
16	West Virginia	63	64	60	59	59	55
17	Kentucky	62	58	60	59	58	53
18	Pennsylvania	60	56	53	52	51	48
19	Georgia	59	59	61	60	53	49
20.5	Ohio	58	56	53	54	53	51
20.5	Maine	58	54	56	53	50	45
22.5	Florida	57	55	55	55	52	52
22.5	Arizona	57	51	55	55	54	52
24.5	Nevada	56	53	52	52	48	44
24.5	Wisconsin	56	52	52	47	46	36
26	Indiana	55	55	57	53	49	45
27	Washington	53	48	47	48	50	48
28	Michigan	52	50	51	51	48	47
	United States	**52**	**50**	**49**	**48**	**46**	**44**
29	Texas	51	45	38	35	32	29
31	Colorado	50	50	47	47	44	43
31	Illinois	50	49	47	45	44	42
31	Tennessee	50	47	45	45	43	44
33	Delaware	46	42	62	62	58	58
35	Alabama	44	45	45	46	46	45
35	Oregon	44	45	44	45	44	40
35	Minnesota	44	42	35	34	30	30
37	New Mexico	42	40	39	34	31	28
38	Idaho	39	41	37	40	35	37
39	Mississippi	38	33	34	30	31	31
40	Montana	31	31	28	27	26	22
41	Wyoming	30	30	34	34	33	31
42	**Iowa**	**29**	**30**	**27**	**25**	**22**	**18**
43	Arkansas	27	22	23	21	20	19
44	Missouri	26	26	24	20	19	20
45.5	Louisiana	24	25	24	24	23	21
45.5	Kansas	24	25	22	20	20	18
47	Nebraska	19	22	20	21	20	18
48	Oklahoma	16	17	17	15	15	16
49	South Dakota	14	19	9	9	7	12
50	Alaska	12	12	13	12	10	10
51	North Dakota	7	5	5	5	5	4

SOURCE: The College Board, Advanced Placement Program, National Summary Reports, 1991-1996.

Table 77

Number of Advanced Placement Exams Per 1,000 11th & 12th Graders

Rank Based on 1996 Data	State	Year					
		1996	1995	1994	1993	1992	1991
1	District of Columbia	277	249	251	221	220	283
2	Virginia	227	221	209	184	170	161
3	Utah	221	229	239	215	211	193
4	New York	218	195	192	180	170	157
5	Florida	197	190	189	171	181	156
6.5	California	195	178	167	157	147	139
6.5	New Jersey	195	163	155	143	136	121
8	Maryland	188	177	164	157	145	135
9	Massachusetts	180	162	153	145	134	121
10	South Carolina	178	171	165	152	141	130
11	Connecticut	171	152	144	138	134	123
12	North Carolina	167	170	145	119	95	81
13	Delaware	155	136	132	135	120	103
	United States	**130**	**122**	**116**	**106**	**98**	**89**
14	Illinois	130	122	115	106	101	90
15	Hawaii	129	140	136	127	129	118
16	Colorado	124	119	122	121	123	115
17	New Hampshire	122	111	95	91	83	74
18	Rhode Island	118	104	98	90	89	86
19	Texas	115	103	82	69	57	52
20	Georgia	110	144	154	125	85	77
21	Michigan	105	91	84	82	76	70
22	Maine	104	96	84	80	71	63
23	Nevada	103	101	97	87	80	80
24	Pennsylvania	102	91	90	86	79	72
25	Alaska	101	91	97	103	98	94
26	Arizona	98	92	105	94	85	66
27	Indiana	97	92	84	68	59	50
28	Wisconsin	96	85	74	64	48	39
29.5	Tennessee	94	88	89	80	74	70
29.5	Vermont	94	87	102	94	84	82
31.5	Alabama	88	88	81	73	70	62
31.5	Ohio	88	83	72	68	63	55
33	Kentucky	86	79	78	74	69	59
34	New Mexico	76	74	78	74	80	72
35	Minnesota	75	77	51	46	40	35
36	West Virginia	68	68	62	58	55	48
37.5	Washington	63	57	60	58	57	54
37.5	Montana	63	52	51	44	44	41
39	Oregon	58	60	65	65	65	61
40	Mississippi	54	48	45	39	38	36
41	Oklahoma	49	45	51	48	42	37
42.5	Missouri	48	47	47	44	38	34
42.5	**Iowa**	**48**	**44**	**39**	**37**	**31**	**27**
44.5	Kansas	47	41	40	38	35	36
44.5	Idaho	46	50	56	52	47	44
46	Nebraska	44	48	46	47	41	39
47	Arkansas	42	41	37	32	29	29
48	Louisiana	38	36	39	37	34	34
49	South Dakota	37	35	23	24	18	18
50	Wyoming	34	45	48	42	42	33
51	North Dakota	32	24	21	19	19	19

SOURCE: The College Board, Advanced Placement Program, National Summary Reports, 1991-1996.

Table 78 reflects the average advanced placement examination scores for all candidates. Average AP scores for 1996 increased for both Iowa and for the nation over 1995 figures. Average scores for both Iowa and for the nation were lower compared to 1994 results.

Table 78

AVERAGE ADVANCED PLACEMENT EXAMINATION SCORES FOR ALL CANDIDATES — 1993 TO 1996

	Year							
	1993		1994		1995		1996	
	Total Exams Taken	Average AP Score	Total Exams Taken	Average AP Score	Total Exams Taken	Average AP Score	Total Exams Taken	Average AP Score
Iowa	2,788	3.13	3,037	3.27	3,627	3.11	4,112	3.14
Nation	623,933	3.00	684,449	3.06	767,881	2.96	824,329	2.99

SOURCE: THE COLLEGE BOARD, IOWA AND NATIONAL SUMMARY REPORT, ADVANCED PLACEMENT PROGRAM, 1993 TO 1996

National Assessment of Educational Progress (NAEP)

For more than a quarter of a century the National Assessment of Educational Progress (NAEP), funded through the U.S. Department of Education, has assessed student achievement nationwide in a number of subject matter areas. In 1990 NAEP began the State Assessment Programs which allowed for comparison of student achievement across participating states. Mathematics achievement results from the State Assessment Program are provided for Iowa, the nation, and for other midwest states for grades four and eight for 1990, 1992 and 1996. Science achievement results are also presented for 1996 for eighth grade students.

Student achievement levels used by NAEP fall under the headings of basic, proficient, and advanced. The basic level refers to partial mastery of knowledge and skills that are fundamental for proficient work at a grade level. The proficient level represents solid academic performance at a grade level. Finally, the advanced level indicates superior student performance at a grade level. The governing board of NAEP, National Assessment Governing Board states that "all who are concerned about what students should know and be able to do and how good is good enough should read and interpret these achievement levels, recognizing that this is a developing, judgmental process and is subject to various interpretations. The decision to include the levels in NAEP reporting is an attempt to make the assessment results more useful for parents, educators, and policy makers by providing performance standards against which to measure educational progress."[1]

It should be noted that although Iowa NAEP scores and performance levels are provided in this section, the Iowa sample failed to meet one or more the the NAEP guidelines for participation rates in 1996.

U.S. Department of Education, [1]NAEP 1996 Mathematics Report Card for the Nation and the States.

Mathematics (Grade 4)

In 1996 a random sample of 2,395 Iowa public school students from 95 schools and 284 nonpublic school students from 15 schools participated in the fourth grade NAEP mathematics assessment. The average scores are displayed in Table 79 for Iowa, for the nation, and for other midwest states. In both 1992 and 1996 Iowa students scored above the national average, scoring 12 points higher in 1992 and 7 points higher in 1996. The average Iowa score in 1996 was down one point compared to 1992 while scores for the nation and for other states shown all reflected increases. For 1996 Iowa's average mathematics score for grade four was lower than Maine, Minnesota, and Connecticut (232), and Wisconsin and North Dakota (231). The differences in scores, however, were not statistically significant.

Table 79

Average NAEP Mathematics Scale Scores of Fourth Grade Public School Students

State	1992	1996
Nation	218	222
Iowa*	230	229
Minnesota	228	232
Missouri	222	225
Nebraska	226	228
North Dakota	229	231
Wisconsin	228	231

SOURCE: U.S. DEPARTMENT OF EDUCATION, NAEP 1996 MATHEMATICS REPORT CARE FOR THE NATION AND THE STATES.
NOTE: *THE IOWA SAMPLE FAILED TO MEET NAEP GUIDELINES FOR PARTICIPATION RATES IN 1996.

The percentages of Iowa public school fourth graders who attained various achievement levels are shown in Table 80. In 1996, there was a larger percentage of Iowa students "at or above the Basic" level compared to 1992 Iowa results, however a smaller percentage of Iowa students achieved "at or above the Proficient" level compared to 1996 results of most other midwest states and compared to Iowa student achievement in 1992.

Table 80

Percentage of Fourth Grade Public School Students Attaining NAEP Mathematics Achievement Levels

	1992 NAEP Achievement Level				1996 NAEP Achievement Level			
State	Advanced	At or Above Proficient	At or Above Basic	Below Basic	Advanced	At or Above Proficient	At or Above Basic	Below Basic
Nation	2%	17%	57%	43%	2%	20%	62%	38%
Iowa*	**2**	**26**	**72**	**28**	**1**	**22**	**74**	**26**
Minnesota	3	26	71	29	3	29	76	24
Missouri	1	19	62	38	1	20	66	34
Nebraska	2	22	67	33	2	24	70	30
North Dakota	1	22	72	28	2	24	75	25
Wisconsin	2	24	71	29	3	27	74	26

SOURCE: U.S. DEPARTMENT OF EDUCATION, NAEP 1996 MATHEMATICS REPORT CARD FOR THE NATION AND THE STATES.
NOTE: *THE IOWA SAMPLE FAILED TO MEET NAEP GUIDELINES FOR PARTICIPATION RATES IN 1996.

NAEP public school mathematics scores by gender for 1992 and 1996 are depicted in Table 81.The data suggest that males performed slightly better than females in both Iowa and in the nation, however, there were smaller differences between scores for males and females for Iowa than for the nation.

Table 81

FOURTH GRADE PUBLIC SCHOOL STUDENT AVERAGE NAEP MATHEMATICS SCALE SCORES BY GENDER

	1992		1996	
	Iowa	Nation	Iowa	Nation
Female	229	218	228	221
Male	230	220	230	224

SOURCE: U.S. DEPARTMENT OF EDUCATION, NAEP 1996 MATHEMATICS STATE REPORT FOR IOWA.
NOTE: THE IOWA SAMPLE FAILED TO MEET NAEP GUIDELINES FOR PARTICIPATION RATES IN 1996.

Mathematics (Grade 8)

In 1996, a total of 2,169 public school students from 93 schools and 282 nonpublic school students from 15 nonpublic schools participated in the NAEP eighth grade mathematics assessment. The scores of Iowa students are presented in Table 82 along with scores of students for the nation and from other midwest states. Iowa scores for eighth grade students were tied for first with North Dakota, Maine, and Minnesota and were 13 points above the average for the nation in 1996.

Table 82

AVERAGE NAEP MATHEMATICS SCALE SCORES OF EIGHTH GRADE PUBLIC SCHOOL STUDENTS

	Year		
State	1990	1992	1996
Nation	263	266	271
Iowa*	278	283	284
Minnesota	275	282	284
Missouri	-	271	273
Nebraska	276	278	283
North Dakota	281	283	284
Wisconsin	275	278	283

SOURCE: U.S. DEPARTMENT OF EDUCATION, NAEP 1996 MATHEMATICS REPORT CARD FOR THE NATION AND THE STATES.
NOTE: *THE IOWA SAMPLE FAILED TO MEET NAEP GUIDELINES FOR PARTICIPATION RATES IN 1996.

The percentage of Iowa eighth grade public school students reaching various NAEP achievement levels is reported in Table 83. In 1996 the percentage of Iowa eighth graders "at or above the basic" level increased by 8 percentage points over the 1990 level. There was also a 6 percentage point increase for the percent of students "at or above proficient" level compared to 1990 and an 8 percentage point decrease in the

students performing below the basic level. The decrease in the percentage of students performing below the basic level also occurred for other midwest states as well.

Table 83

Percentage of Eighth Grade Public School Students Attaining NAEP Mathematics Achievement Levels

	Year											
	1990 NAEP Achievement Levels				1992 NAEP Achievement Levels				1996 NAEP Achievement Levels			
State	Advanced	At or Above Proficient	At or Above Basic	Below Basic	Advanced	At or Above Proficient	At or Above Basic	Below Basic	Advanced	At or Above Proficient	At or Above Basic	Below Basic
Nation	2%	15%	51%	49%	3%	20%	56%	44%	4%	23%	61%	39%
Iowa*	3	25	70	30	4	31	76	24	4	31	78	22
Minnesota	3	23	67	33	5	31	74	26	6	34	75	25
Missouri	-	-	-	-	2	20	62	38	2	22	64	36
Nebraska	3	24	68	32	3	26	70	30	5	31	76	24
North Dakota	4	27	75	25	3	29	78	22	4	33	77	23
Wisconsin	3	23	66	34	3	27	71	29	5	32	75	25

SOURCE: U.S. DEPARTMENT OF EDUCATION, NAEP 1996 MATHEMATICS REPORT CARD FOR THE NATION AND THE STATES.
NOTE: *THE IOWA SAMPLE FAILED TO MEET NAEP GUIDELINES FOR PARTICIPATION RATES IN 1996.

Gender differences in eighth grade mathematics scores for public school students are detailed in Table 84. In 1996 gender score differences were very small, as they were in 1992. Both Iowa males and females performed better than their national counterparts.

Table 84

Eighth Grade Public School Student Average NAEP Mathematics Scale Scores by Gender

	Year					
	1990		1992		1996	
Gender	Iowa	Nation	Iowa	Nation	Iowa	Nation
Female	275	261	282	267	285	271
Male	281	262	284	266	283	270

SOURCE: U.S. DEPARTMENT OF EDUCATION, NAEP 1996 MATHEMATICS STATE REPORT FOR IOWA.
NOTE: THE IOWA SAMPLE FAILED TO MEET NAEP GUIDELINES FOR PARTICIPATION RATES IN 1996.

Science (Grade 8)

NAEP assessed the area of science in 1990 and again in 1996, however, the 1996 assessment was done using a new framework. This new framework included both scientific knowledge and science performance. The scientific knowledge component focused on making factual information meaningful and the science performance component focused on knowledge of facts, ability to integrate knowledge into larger components and the capacity to use the tools, procedures, and reasoning processes of science to develop an increased understanding of the natural world. Due to these fundamental changes in the nature of the science assessment no comparisons between 1990 and 1996 performance levels were possible.

A total of 2,172 Iowa eighth grade school students from 91 schools and 246 nonpublic students from 14 nonpublic schools participated in the 1996 science assessment. Iowa average science scores were lower than Maine (163), North Dakota and Montana (162), Wisconsin (160), and Minnesota (159). The average scores for Maine, North Dakota, and Montana were significantly higher than Iowa scores from a statistical standpoint (Table 85). Iowa's top students, those in the 90th percentile, scored higher than the comparable group in the nation, but scored lower than students in Wisconsin, Minnesota, and North Dakota.

Table 85

1996 Average NAEP Science Scale Scores and Selected Percentiles of Eighth Grade Public School Students

		Percentile				
State	Average Score	10th	25th	50th	75th	90th
Nation	148	102	126	151	172	191
Iowa*	158	121	140	160	178	193
Minnesota	159	121	140	161	179	194
Missouri	151	109	132	154	172	189
Nebraska	157	118	139	159	178	193
North Dakota	162	127	146	164	181	195
Wisconsin*	160	120	141	162	181	196

Source: U.S. Department of Education, NAEP 1996 Science State Report for Iowa.
Note: *The Iowa and Wisconsin samples failed to meet NAEP guidelines for participation rates in 1996.

Gender differences in NAEP eighth grade science scores for public school students are reflected in Table 86. Iowa average scores were higher than the nation for both males and females. There were very small gender score differences for both Iowa and for the nation between males and females.

Table 86

1996 Eighth Grade Public School Student Average NAEP Science Scale Scores by Gender

Gender	Iowa	Nation
Female	157	148
Male	159	149

Source: U.S. Department of Education, NAEP 1996 Science Report Card for the Nation and the State.
Note: The Iowa sample failed to meet NAEP guidelines for participation rates in 1996.

Post Secondary Enrollment Options

Under the Post Secondary Enrollment Options Act secondary students can earn college credit while they are attending high school. The number of juniors and seniors participating in the Post Secondary Enrollment Options program increased by more than 16 percent in 1995-96 over the previous year. Since 1992-93 the number of students involved in the program has increased from 2,187 to 4,023 in 1995-96, an increase of nearly 84 percent (Tables 87 and 88). The number of students enrolled by type of institution since 1992-93 has increased 89.7 percent for community colleges, 76.4 percent for Regents institutions, and 44.8 percent for four year private colleges.

Table 87

1992-1993 Iowa Post Secondary Enrollment Options Act Enrollment by Type of Institution and Type of Course

Institution	Enrollments			Number of Courses Taken During the Year					
	Juniors	Seniors	Junior-Senior Total	Math	Science	Social Science	Humanities	Career Options	Vocational Technical
Regents Institution	28	120	148	63	38	56	88	4	5
Community College	311	1,416	1,727	243	217	738	901	210	247
Private 4 Yr. College	39	267	306	54	30	135	163	19	7
Private 2 Yr. College		6	6	6			2		1
Totals[1]	378	1,809	2,187	368	285	929	1,154	233	260

Source: Iowa Department of Education, Basic Educational Data Survey, Post Secondary Enrollment Options file, 1992-93.
Note: [1]Excluded from total enrollments are 32 freshmen and sophomores.

Table 88

1995-1996 Iowa Post Secondary Enrollment Options Act Enrollment by Type of Institution and Type of Course

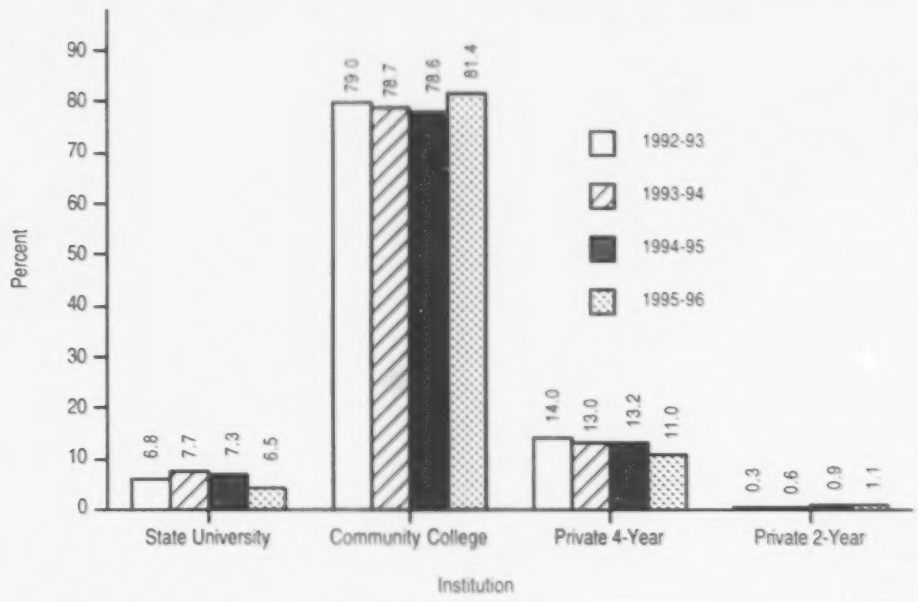
Institution	Enrollments			Number of Courses Taken During the Year					
	Juniors	Seniors	Junior-Senior Total	Math	Science	Social Science	Humanities	Career Options	Vocational Technical
Regents Institution	52	209	261	68	70	91	130	5	3
Community College	673	2,603	3,276	477	342	1,389	1,468	449	436
Private 4 Yr. College	69	374	443	115	66	191	212	20	35
Private 2 Yr. College	4	39	43	22	6	20	17	7	6
Totals[1]	798	3,225	4,023	682	484	1,691	1,827	481	480

Source: Iowa Department of Education, Basic Educational Data Survey, Post Secondary Enrollment Options file, 1995-96.
Note: [1]Excluded from total enrollments are 75 freshmen and sophomores.

The distribution of students by type of post secondary institution attended has changed only slightly over the period from 1992-93 to 1995-96. In 1995-96, 81.4 percent of students enrolled in the Post Secondary Enrollment Options programs attended community colleges, 11 percent attended four year private colleges, and 6.5 percent attended Regents institutions (Figure 39).

Figure 39

PERCENTAGE GROWTH IN POST SECONDARY ENROLLMENT OPTIONS ENROLLMENTS 1992-93 TO 1995-96



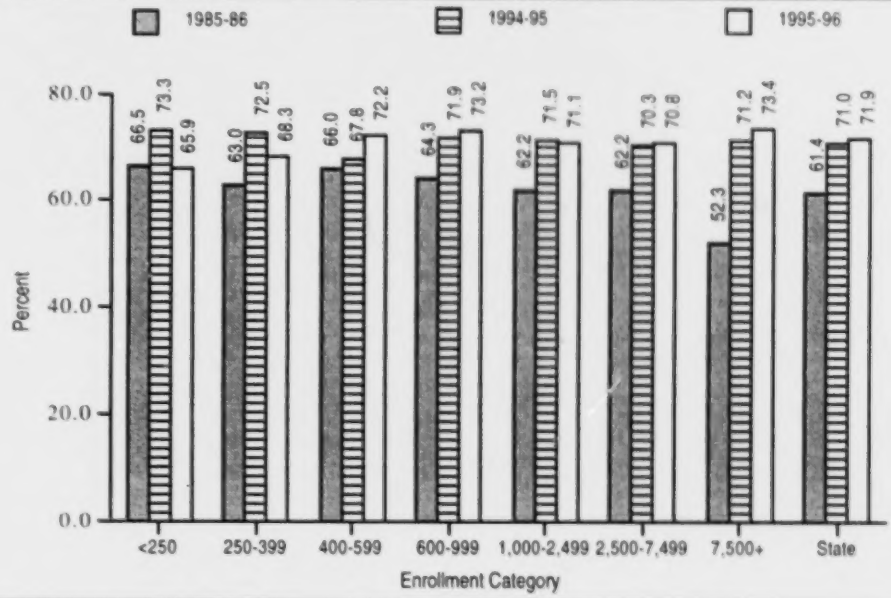
SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, POST SECONDARY ENROLLMENT OPTIONS FILES, 1992-93 TO 1995-96.

Pursuit of Post Secondary Education/Training

The percentages of graduates pursuing post secondary education/training are shown in Figures 40 and 41 and Tables 89 and 90. Figure 40 reflects the status of post secondary pursuits by enrollment category. On a statewide basis the percentage of students pursuing post secondary education/training has increased from 61.4 percent in 1985-86 to 71.9 percent in 1995-96. Compared to 1985-86 figures, the percentages of students pursuing post secondary education/training reflected increases in each enrollment category except for the enrollment category under 250 enrollment , which decreased slightly. The largest percentage change occurred for districts of 7,500 and above, an increase of more than 20 percentage points. For districts with enrollments of 400 or greater there was little variation in the percentage of students going on to some type of post secondary education/training in 1995-96.

Figure 40

Iowa Public School Graduates Pursuing Post Secondary Education/Training in 1985-86, 1994-95, and 1995-96 by Enrollment Category



Source: Iowa Department of Education, Basic Educational Data Survey, Graduate Follow-Up Files, 1985-86, 1994-95, and 1995-96.

Table 89 depicts the distribution of students pursuing post secondary education/ training by institution type. The largest percentage point change from 1985 to 1995 occurred for community colleges which showed an increase from 18.2 percent to 28.2 percent for the period. The percentage of students continuing their education at technical/trade school decreased by 2.5 percentage points over the period.

Table 89

Iowa Public School Graduates Status One Year After Graduation 1985 Graduates vs 1995 Graduates

	Number of Students		Percent of Total Graduates	
Post Secondary Institution	1985	1995	1985	1995
Private 4-Year College	4,236	4,193	12.2%	13.5%
Public 4-Year College	8,061	7,764	23.3	25.0
Community College	6,295	8,749	18.2	28.2
Private 2-Year College	488	407	1.4	1.3
Technical/Trade School	2,113	1,112	6.1	3.6
Apprentice Training	39	81	.1	.3
Total	21,232	22,306	61.4	71.9

Source: Iowa Department of Education, Basic Educational Data Survey, Graduate Follow-up Files.

The percent of Iowa public school graduates attending four year post secondary institutions has increased by only two percentage points since 1986, increasing from 36.5 percent to 38.5 percent in 1995, while the percentage of students attending all two-year institutions increased nearly 10 percentage points over the period, from 19.6 percent to 29.5 percent (Table 90 and Figure 41).

Table 90

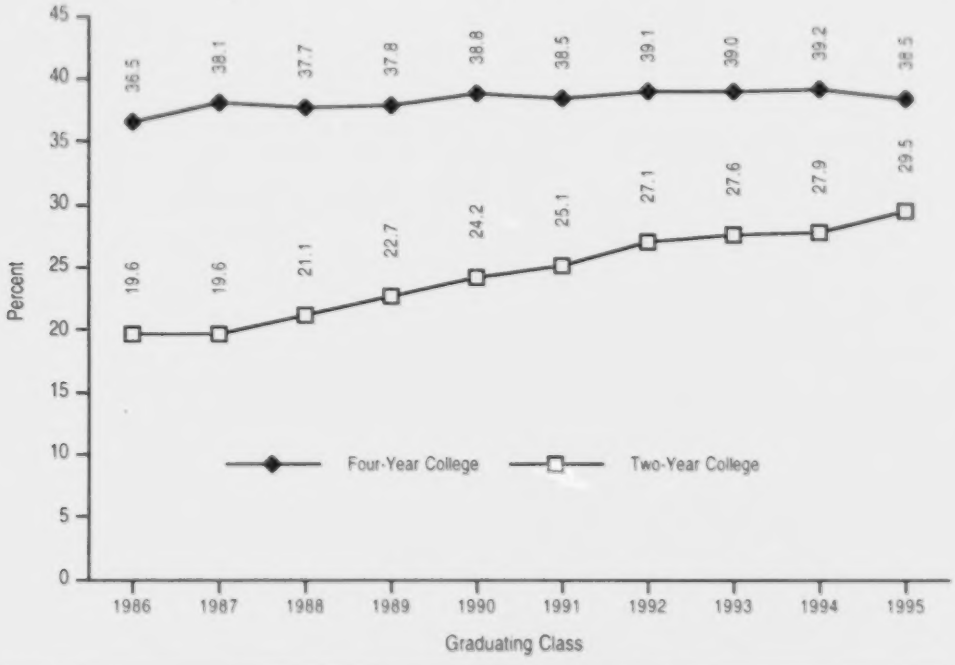
Iowa Public School Graduate Status One Year After Graduation

Post Secondary Institution		Graduating Class 1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Four-Year College	Total	12,264	13,065	13,004	12,587	11,958	11,129	11,445	11,509	11,610	11,957
	Percent	36.5%	38.1%	37.7%	37.8%	38.8%	38.5%	39.1%	39.0%	39.2%	38.5%
Two-Year College	Total	6,583	6,737	7,274	7,564	7,463	7,258	7,946	8,162	8,269	9,156
	Percent	19.6%	19.6%	21.1%	22.7%	24.2%	25.1%	27.1%	27.6%	27.9%	29.5%

Source: Iowa Department of Education, Basic Educational Data Survey, Graduate Follow-up Files.

Figure 41

Percent of Iowa High School Graduates Attending Four-Year and Two-Year Colleges One Year After Graduation Graduating Classes 1986 to 1995



Source: Iowa Department of Education, Basic Educational Data Survey, Graduate Follow-up Files.

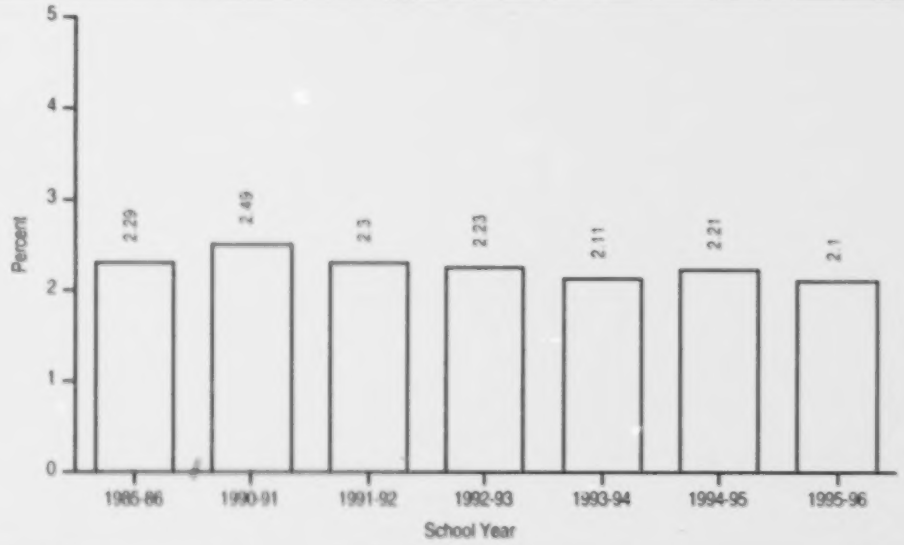
Dropouts

A dropout is a student in any of grades seven through twelve not enrolled in an educational program provided by a public school district and who has not graduated from high school or has not completed a district or state approved educational program.

The dropout rate for Iowa public schools for grade 7-12 students has remained relatively stable since 1985-86 (Figure 42). Table 91 displays the percent of total dropouts by racial/ethnic group as well as the percent of grade 7-12 enrollment represented by each racial/ethnic group. A disproportionate percentage of dropouts were found for three of the four minority groups, African Americans, Hispanics, and American Indians. African American students accounted for 9 percent of total dropouts, more than three times greater than the proportion of the 7-12 enrollment that they represented in 1995-96.

Figure 42

Iowa Grade 7-12 Dropouts as a Percent of Public School Students in Grades 7-12



Source: Iowa Department of Education, Basic Educational Data Survey, Dropout files.

Table 91

Percent of Iowa Public School Dropouts by Racial/Ethnic Group 1992-93 to 1995-96

	% of Total Dropouts				% of 7-12 Enrollment			
Racial/Ethnic Group	1992-93	1993-94	1994-95	1995-96	1992-93	1993-94	1994-95	1995-96
White	82.1%	85.5%	87.8%	83.6%	94.2%	94.0%	94.0%	93.7%
African American	9.3	8.0	5.6	9.0	2.6	2.7	2.7	2.7
Hispanic	4.3	3.8	4.3	4.6	1.4	1.5	1.5	1.5
Asian	2.8	1.7	1.3	1.6	1.4	1.4	1.4	1.7
American Indian	1.6	1.0	1.0	1.2	.3	.3	.3	.4

Source: Iowa Department of Education, Basic Educational Data Survey, Dropout Files.

Table 92 displays 1995-96 school year dropouts by grade level and by district enrollment category. In 1995-96 a total of 4,835 students were reported as dropouts. In 1995-96, as in previous years, the largest percentage of dropouts was from eleventh grade, 32.3 percent, followed by twelfth grade at 27.3 percent. Less than one percent of dropouts were from grades 7 and 8 combined.

Table 92

TOTAL IOWA PUBLIC SCHOOL DROPOUTS BY ENROLLMENT CATEGORY
1995-96

Enrollment Category	Grade Level 7	8	9	10	11	12	Total Dropouts	% of Total Dropouts	% of Enroll 7-12	Drop-Out Percent
State	9	34	733	1,176	1,564	1,319	4,835	100.0%	100.0%	2.10%
<250	0	0	2	0	4	2	8	0.2	0.7	0.51
250-399	1	1	9	23	26	25	85	1.8	3.4	1.07
400-599	0	2	32	73	84	88	279	5.8	9.3	1.31
600-999	0	7	58	94	131	107	397	8.2	16.6	1.04
1,000-2,499	4	12	131	296	411	302	1,156	23.9	26.2	1.92
2,500-7,499	2	7	152	258	371	373	1,163	24.0	19.3	2.63
7,500+	2	5	349	432	537	422	1,747	36.1	24.5	3.10

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, DROPOUT FILE.

In 1995-96, as in previous years, districts with enrollments of 2,500 to 7,499 and the largest enrollment category districts had a disproportionate percentage of dropouts compared to the percentage of 7-12 enrollments. More than 60 percent of all dropouts were from these two enrollment categories while they represented just under 44 percent of the 7-12 enrollment.

High School Completion Rates of 18-24 Year Olds Not Currently Enrolled in High School

Table 93 presents information on the three year average high school completion rates of 18-24 year olds not enrolled in school. The information, from the U.S. Department of Commerce, Bureau of Census, presents three-year average completion rates for 1990-92 and 1993-95. The three year average high school completion rate for 18-24 year olds not enrolled in school was 85.5 percent for the nation for 1990-92 and 85.3 percent for the period 1993-95. Comparable Iowa figures were 94.6 percent for 1990-92 and 93.2 percent for the period 1993-95. Iowa's three-year average completion rate for 1993-95 ranked ninth in the country.

Table 93

THREE YEAR AVERAGE HIGH SCHOOL COMPLETION RATES OF 18- THROUGH 24-YEAR-OLDS NOT CURRENTLY ENROLLED IN HIGH SCHOOL OR BELOW 1990-92 AND 1993-95

(RANK ORDER BY 1993-95 THREE YEAR AVERAGE)

State	1993-95	1990-92
North Dakota	96.6	96.3
Connecticut	94.7	89.9
Nebraska	94.5	92.5
Wisconsin	93.7	92.4
Utah	93.6	93.9
Maryland	93.6	88.6
Minnesota	93.3	92.5
Delaware	93.3	86.2
Iowa	**93.2**	**94.6**
Maine	92.9	91.9
Massachusetts	92.5	89.8
Hawaii	92.0	93.5
New Jersey	91.8	90.8
South Dakota	91.5	89.1
Kansas	90.9	93.2
Wyoming	90.8	92.0
Alaska	90.5	85.6
Missouri	90.3	88.1
Montana	89.8	91.6
Pennsylvania	89.5	90.2
Rhode Island	89.4	87.9
Michigan	88.7	87.2
Indiana	88.5	87.8
Ohio	88.4	90.0
Colorado	88.4	88.1
Arkansas	88.4	87.5
Vermont	88.1	87.0
South Carolina	88.0	85.0
Virginia	87.7	88.6
District of Columbia	87.7	84.0
New York	87.1	88.0
Oklahoma	87.0	84.3
New Hampshire	86.9	87.9
West Virginia	86.8	83.3
Illinois	86.7	86.0
Idaho	86.4	84.7
Washington	85.7	90.7
North Carolina	85.5	83.0
United States	**85.3**	**85.5**
Tennessee	84.6	76.7
Alabama	84.0	85.2
Arizona	84.0	81.7
Mississippi	83.9	85.4
Oregon	82.7	89.6
New Mexico	82.4	84.1
Kentucky	82.4	81.1
Nevada	81.9	82.1
Florida	80.7	84.1
Louisiana	80.5	83.9
Georgia	80.3	85.1
Texas	79.5	80.0
California	78.9	77.3

SOURCE: U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS, CURRENT POPULATION SURVEY, OCTOBER (VARIOUS YEARS) UNPUBLISHED DATA.

Finance

The finance section provides information on revenues and expenditures for 1985-86, 1994-95, and 1995-96. Information is also provided on total statewide budgets and on state aid, property taxes, and income surtaxes.

Function Category Expenditures

The majority of general fund expenditures in 1985-86, 1994-95, and 1995-96 was for instruction, Table 94. In 1995-96, 68.6 percent of the general fund expenditures was attributed to instruction compared to 65.3 percent in 1985-86. The percent of expenditures for administrative services decreased from 10.2 percent in 1985-86 to 9.7 percent in 1995-96. The percent of total expenditures going toward operation and maintenance decreased from 12.2 percent in 1985-86 to 9.4 percent in 1995-96. Student support services (guidance health, attendance services, etc.) and staff support services (library, staff development, telecommunications services, etc.) both accounted for 3.7 percent of expenditures in 1995-96.

Table 94

FUNCTION CATEGORY EXPENDITURES AS A PERCENT OF TOTAL GENERAL FUND EXPENDITURES IN IOWA PUBLIC SCHOOLS 1985-86, 1994-95, AND 1995-96

	Year		
	Percent of Total General Fund Expenditures		
Function Category	1985-86	1994-95	1995-96
Instruction	65.3%	68.7%	68.6%
Student Support Services	2.9	3.6	3.7
Staff Support Services	3.2	3.5	3.7
Administrative Services	10.2	9.7	9.7
Operations and Maintenance	12.2	9.5	9.4
Student Transportation	5.2	4.2	4.1
Central Support Services	0.6	0.5	0.5
Food Services Subsidy	0.2	0.1	0.1
Community Service and Education	0.2	0.2	0.2

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORTS.

The percent of general fund expenditures for instruction varied from an average of 67.4 percent, in districts with enrollments of 600 to 999, to 68.9 percent in districts with enrollments greater than 2,499 (Table 95). The percent of expenditures for administration varied from 12.1 percent in districts with enrollments of 250 to 399, to 8.4 percent in the highest enrollment districts. Operations and maintenance varied from 10.1 percent of total expenditures in the districts with enrollments of 7,500 or more to 8.1 percent in the lowest enrollment districts.

Table 95

Function Category Expenditures as a Percent of Total General Fund Expenditures in Iowa Public Schools by Enrollment Category 1995-96

Function Category	Enrollment Category <250 N=26	250-399 N=50	400-599 N=81	600-999 N=108	1,000-2,499 N=85	2,500-7,499 N=25	7,500+ N=9	State
	Percent of Total General Fund Expenditures							
Instruction	69.9%	68.2%	68.1%	67.4%	68.7%	68.9%	68.9%	68.6%
Student Support Services	2.0	2.5	2.5	3.0	3.6	4.0	4.6	3.7
Staff Support Services	2.3	3.0	3.0	3.1	3.5	4.7	3.9	3.7
Administrative Services	11.7	12.1	11.5	10.7	10.0	9.2	8.4	9.7
Operations and Maintenance	8.1	8.6	9.0	9.5	9.1	9.3	10.1	9.4
Student Transportation	5.3	5.3	5.2	5.8	4.5	3.3	2.6	4.1
Central Support Services	0.2	0.1	0.4	0.3	0.3	0.4	1.1	0.5
Food Services Subsidy	0.3	0.2	0.1	0.1	0.1	0.0	0.1	0.1
Community Service and Ed.	0.2	0.0	0.2	0.1	0.2	0.2	0.4	0.2

SOURCE: Iowa Department of Education, Certified Annual Financial Report, 1995-96.

Object Category Expenditures

Table 96 displays object category expenditures for 1985-86, 1994-95, and 1995-96. Salaries and benefits accounted for over 80 percent of general fund expenditures in all three years. The percent going toward salaries has declined from 68.1 percent in 1985-86 to 65.3 percent in 1995-96. Statewide, expenditures for benefits have increased from 12.9 percent in 1985-86 to 15.5 percent and 15.4 percent in 1994-95 and 1995-96 respectively.

Table 96

Object Category Expenditures as a Percent of Total General Fund Expenditures in Iowa Public Schools 1985-86, 1994-95, and 1995-96

Object Category	Year 1985-86 Percent	1994-95 Percent	1995-96 Percent
Salaries	68.1%	65.9%	65.3%
Benefits	12.9	15.5	15.4
Purchased Services	9.9	9.4	9.7
Supplies	5.7	6.2	6.5
Property	2.6	2.6	2.8
Other Objects	.8	.4	.3

SOURCE: Iowa Department of Education, Certified Annual Financial Reports.

Displayed in Table 97 are the object category expenditures by enrollment category. Districts with more students expend a higher percent of the general fund on salaries and benefits than do small districts. Districts with enrollments of 7,500 and above spend 84.4 percent of their general fund on salaries and benefits compared to districts with fewer than 250 pupils, expending only 61.3 percent. The 29.0 percent expended for purchased services in small districts reflects the whole grade sharing, teacher and administrator and staff sharing and the purchase of other educational services.

Table 97

Object Category Expenditures as a Percent of Total General Fund Expenditures in Iowa Public Schools by Enrollment Category 1995-96

Object Category	Enrollment Category						
	<250 N=26	250-399 N=50	400-599 N=81	600-999 N=108	1,000-2,499 N=85	2,500-7,499 N=25	7,500+ N=9
Salaries	49.9%	58.1%	62.3%	63.1%	66.3%	67.2%	66.9%
Benefits	11.4	13.2	13.7	14.3	14.9	15.4	17.5
Purchased Services	29.0	17.1	12.4	10.5	8.4	8.5	8.7
Supplies	6.9	7.5	7.6	7.8	7.2	5.9	5.1
Property	2.2	3.8	3.6	4.1	3.0	2.5	1.5
Other Objects	.5	.3	.4	.3	.2	.5	.3

Source: Iowa Department of Education, Certified Annual Financial Report, 1995-96.

Revenues

The source of revenues for school districts is displayed in Table 98. In 1995-96, local taxes and state foundation aid were the primary source of revenue, 35.8 and 50.9 percent respectively, In 1995-96, taxes include both property and income surtax revenues. In 1985-86 local taxes accounted for 47.3 percent of general fund revenues and in 1995-96 they had decreased to 35.8 percent. State foundation aid increased from 46.0 percent of all general fund revenues in 1985-86 to 50.9 percent of revenues in 1995-96. Revenues from federal sources increased from 2.4

Table 98

Revenues by Source as a Percent of Total General Fund Revenues in Iowa Public Schools 1985-86, 1994-95, and 1995-96

Source of Revenue	Year		
	1985-86	1994-95	1995-96
	Percent of Total General Fund Revenues		
Local Taxes	47.3%	35.4%	35.8%
Interagency	1.4	3.2	3.3
Other Local Sources	1.8	2.0	2.3
Intermediate Sources	0.1	0.3	0.3
State Foundation Aid	46.0	51.9	50.9
Other State Sources	0.7	4.4	4.5
Federal Sources	2.4	2.6	2.7
Other Financing Sources	0.3	0.2	0.2

Source: Iowa Department of Education, Certified Annual Financial Reports.

percent in 1985-86 to 2.7 percent in 1995-96. The other two highest revenue sources, "Interagency" and "Other Local Sources", include money received from other districts or AEAs for transportation, tuition, etc., and for Educational Excellence, nonpublic transportation, technology, etc., as "Other."

Table 99 displays the revenue sources by enrollment category. Districts with enrollments under 250 received 43.3 percent of their revenue from local taxes while districts with enrollments of 2,500 to 7,499 receive 35.9 percent of their funds from local taxes. Foundation aid accounted for 41.1 percent of the revenue in districts with enrollments of less than 250 pupils compared to 53.0 percent in districts with enrollments of 1,000 to 2,499.

Table 99

Revenues by Source as a Percent of Total General Fund Revenues in Iowa Public Schools by Enrollment Category 1995-96

	Enrollment Category						
	<250 N=26	250-399 N=50	400-599 N=81	600-999 N=108	1,000-2,499 N=85	2,500-7,499 N=25	7,500+ N=9
Source of Revenue	Percent of Total General Fund Expenditures						
Local Taxes	43.3%	39.2%	37.1%	36.4%	34.4%	35.9%	35.4%
Interagency	4.1	7.1	4.8	4.0	3.6	3.3	1.5
Other Local Sources	2.2	2.6	2.3	2.0	2.1	2.3	2.8
Intermediate Sources	0.1	0.2	0.0	0.1	0.1	0.1	1.0
State Foundation Aid	41.1	43.3	48.6	50.7	53.0	51.8	50.7
Other State Sources	6.3	4.9	4.7	4.3	4.2	4.0	4.9
Federal Sources	2.6	2.4	2.3	2.3	2.4	2.3	3.6
Other Financing Sources	0.3	0.3	0.2	0.2	0.2	0.3	0.1

Source: Iowa Department of Education, Certified Annual Financial Report, 1995-96.

Expenditures Per Pupil

Table 100 presents per pupil expenditures by enrollment categories and the state average for 1985-86, 1994-95, and 1995-96. Expenditures include the areas of instruction, student support services, staff support services, administration, operations and maintenance, transportation, and central support. Excluded are expenditures for community services, adult education, nonpublic education, co-curricular activities, financial support for food services programs, AEA flow-through, inter-fund transfers, facility acquisition, and debt services. Expenditures are also reduced for interagency revenues received from other school districts and AEAs for services sold to them.

In 1995-96, the average per pupil expenditure was $4,680 compared to $2,916 in 1985-86. In 1985-86, districts with enrollments of 400-599 expended $2,917 per pupil compared to an average of $3,368 for districts with enrollments less than 250. This means that districts with enrollments of less than 250 expended 19.5 percent more per pupil compared to the amount expended in districts of 1,000 to 2,499 students in both 1985-86 and in 1995-96.

Table 100

Average Per Pupil Expenditures in General Fund in Iowa Public Schools by Enrollment Category 1985-86, 1994-95, and 1995-96

Enrollment Category	Year 1985-86	1994-95	1995-96
<250	$3,368	$5,069	$5,349
250-399	3,000	4,731	4,988
400-599	2,917	4,428	4,674
600-999	2,869	4,382	4,595
1,000-2,499	2,819	4,273	4,477
2,500-7,499	2,899	4,391	4,579
7,500+	2,987	4,706	4,941
State Average	2,916	4,464	4,680

Source: Iowa Department of Education, Certified Enrollment and Certified Annual Financial Reports.

State Aid

The total State Foundation Aid, Educational Excellence in Education funding, and Technology/School Improvement aid was $1.686 billion in 1997-98 (Table 101). This represents approximately 38.7 percent of all general fund appropriations in 1997-98. In 1996-97, the foundation level was increased from 83 to 87.5 percent plus a $30 million Technology/School Improvement fund was created. Both of these increases continued in 1997-98. Not included in the state aid amounts are any state funds expended for Part III of the Iowa Communication Network at the K-12 level.

Table 101

TOTAL IOWA GOVERNMENT APPROPRIATIONS (IN MILLIONS)

Year	State Aid to Districts	General Fund Appropriations	Percent Spent on Education
1997-98	$1,686.0	$4,362.0	38.7%
1996-97	1,615.8	4,126.4	39.2
1995-96	1,425.5	3,842.0	37.1
1994-95	1,360.5	3,615.6	37.6
1993-94	1,324.8	3,471.7	38.2
1992-93	1,273.1	3,394.3	37.5
1991-92	1,185.4	3,178.8	37.3
1990-91	1,147.7	3,130.9	36.7
1989-90	1,047.8	2,853.4	36.7
1988-89	964.1	2,667.5	36.1
1987-88	905.7	2,422.3	37.4
1986-87	761.1	2,190.2	34.8
1985-86	712.3	2,207.0	32.3
1984-85	708.5	2,088.6	33.9
1983-84	660.3	1,976.6	33.4
1982-83	642.3	1,870.9	34.3
1981-82	621.0	1,762.6	35.2

SOURCE: IOWA DEPARTMENT OF MANAGEMENT, LEGISLATIVE FISCAL BUREAU.

Property Taxes

Property taxes needed to fund the combined district cost, increased $27.3 million between 1996-97 to 1997-98 (Table 102). Between 1995-96 and 1996-97 property taxes decreased $55.2 million. This decrease was primarily a result of the increase in the foundation level. The total property taxes are shown with and without tax credit. Tax credits include amounts for agriculture land, family farms, livestock, and the school portion of personal property.

Table 102

Iowa Property Tax Revenues Generated for the School Foundation Formula (In Millions)

Year	Property Taxes	Property Taxes Less Credits
1997-98	$825.5	$728.7
1996-97	798.2	701.4
1995-96	853.4	756.6
1994-95	822.0	752.2
1993-94	793.5	696.7
1992-93	781.1	684.3
1991-92	757.0	670.4
1990-91	741.0	651.2
1989-90	718.3	632.5
1988-89	705.4	619.6
1987-88	721.0	601.9
1986-87	751.7	636.4
1985-86	724.3	612.5
1984-85	700.4	597.5
1983-84	680.2	563.2
1982-83	664.0	543.6
1981-82	635.6	518.9

Source: Iowa Budget Report.

Income Surtaxes

Income surtaxes continue to increase as a source of revenue. Table 103 shows that income surtaxes have increased to $31.3 million. Between 1996-97 and 1997-98, they increased 26.7 percent. Income surtaxes may be used to support the voted

portion of the physical plant and equipment, asbestos, instructional support, or educational improvement levies.

Table 103

IOWA INCOME SURTAXES

Year	Income Surtax in Millions	Percent Increase
1997-98	$31.3	26.7%
1996-97	24.7	21.1
1995-96	20.4	8.5
1994-95	18.8	9.9
1993-94	17.1	5.6
1992-93	16.2	30.6
1991-92	12.4	122.5
1990-91	5.5	77.4
1989-90	3.1	6.9
1988-89	2.9	52.6
1987-88	1.9	

SOURCE: ANNUAL AID AND LEVY WORKSHEETS.

Total Elementary and Secondary Education Budgets

The amount budgeted for elementary and secondary education, by major areas, for 1985-86, 1996-97, and 1997-98 is displayed in Table 104.

In 1997-98, approximately $2.977 billion was budgeted for elementary and secondary programs. The percent of the budget generated through the regular program has decreased from 75.2 percent in 1985-86 to 66.3 percent in 1997-98.

The amount generated for special education expenditures, not including the amount of regular program funds generated by special education students, has increase from $90.4 million in 1985-86 to $216.4 million in 1997-98. Miscellaneous income amounts are estimated and do not include all possible revenue areas.

Table 104

IOWA ELEMENTARY AND SECONDARY BUDGET DETAIL
1985-86, 1996-97, AND 1997-98

Source of Funds	1985-86 Amount	1985-86 Percent	1996-97 Amount	1996-97 Percent	1997-98 Amount	1997-98 Percent
Regular Program	$1,263,768,116	75.2%	$1,902,900,935	66.9%	$1,972,959,620	66.3%
Guarantee Amount	3,161,077	0.2	2,151,807	0.1	2,447,199	0.1
Supplementary Weights	426,616	0.0	20,565,678	0.7	22,894,522	0.8
Special Education	90,438,951	5.4	197,441,773	6.9	216,374,135	7.3
AEA Media	10,865,134	0.6	16,990,907	0.6	17,588,405	0.6
AEA Ed Services	11,986,320	0.7	18,742,111	0.7	19,405,663	0.7
AEA Special Education	60,292,283	3.6	92,444,404	3.2	96,381,311	3.2
Tag SBRC	5,008,416	0.3	13,684,015	0.5	14,313,372	0.5
Dropout SBRC	1,702,264	0.1	22,591,192	0.8	27,373,453	0.9
Other SBRC	14,203,445	0.8	780,000	0.0	1,627,000	0.1
Instructional Support & Enrichment	4,092,470	0.2	82,671,109	2.9	91,801,074	3.1
Educational Improvement			250,797	0.0	333,674	0.0
Enrollment Audit Adjustment			(117,554)	(0.0)	(35,482)	(0.0)
Management	23,199,501	1.4	35,112,548	1.2	35,317,725	1.2
Physical Plant & Equipment			46,810,060	1.6	11,106,194	0.4
67.5 Cent Schoolhouse			13,690,415	0.5	55,934,477	1.9
Playground and Library			1,343,894	0.0	1,396,803	0.0
Debt Service	85,639,275	5.1	78,878,664	2.8	89,523,335	3.0
Miscellaneous*						
Estimated Misc. State Categorical	0	0.0	126,600,000	4.4	127,800,000	4.3
Estimated Misc. Federal	38,100,000	2.3	101,500,000	3.6	101,500,000	3.4
Other Misc.	66,800,000	4.0	70,800,000	2.5	70,800,000	2.4
Total	**$1,679,683,868**	**100.0**	**$2,845,832,755**	**100.0**	**$2,976,842,480**	**100.0**

SOURCE: IOWA DEPARTMENT OF MANAGEMENT, SCHOOL BUDGET MASTER FILE.
NOTES: FOR FY 86, THE ALLOCATION OF DOLLARS TO AEA MEDIA AND AEA ED SERVICES HAS BEEN ESTIMATED.
FOR FY 86, PPEL, 67.5 CENT, PLAYGROUND, LIBRARY AND DEBT SERVICE LEVIES HAVE BEEN REPORTED AS ONE TOTAL FIGURE.
*MISCELLANEOUS INCOME IS AN ESTIMATED AMOUNT.